

Gloucestershire County Council.

5th JULY, 1915.



ANNUAL REPORT

OF

The Medical Officer of Health

INCLUDING A

Summary of the Annual Reports

OF THE

MEDICAL OFFICERS OF HEALTH

IN THE

ADMINISTRATIVE COUNTY OF GLOUCESTER

FOR 1914.



SHIRE HALL, GLOUCESTER,

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Gloucestershire County Council.

ANNUAL REPORT, 1914.

HEALTH DEPARTMENT,

SHIRE HALL,

GLOUCESTER,

14th June, 1915.

*To the Chairman and Members
of the Public Health and Housing Committee.*

GENTLEMEN,

Though—as last year—the accompanying summary of the Annual Reports is far from complete, five of them having not yet reached me, I present it so that the information that is available shall be laid before you.

The preparation of the individual reports, the standard of which is certainly improving, has been attended with unusual difficulty in several instances, those for eight districts having been written while the Medical Officers of Health were on active service. This is one result of the great European War which commenced on the 2nd August, 1914. Such a cataclysm could not fail to have an effect in every sphere, including the administration of civil affairs. The depletion of workers is one such effect; by mutual arrangement the duties of Medical Officers of Health and of Sanitary Inspectors who have joined the Army or Navy have been taken over by those for adjoining districts or by local men, and in my office the places of four clerks who enlisted have been filled by one permanent and three temporary appointments. But an even more important effect is the possibility of grave dangers to the public health; so far, the most obvious result has been the outbreak of cerebro-spinal meningitis which has been prevalent

in some parts of the country, but other immediate fears were fortunately not realised. More remote effects so far as the public health is concerned are the postponement of schemes for improvement in housing and the possibility of the introduction of dangerous infectious diseases as the war progresses. The former was inevitable in view of the more immediate needs of war, but all possible provision should be made for meeting the latter. I feel, therefore, that I should be doing less than my duty if I did not urge you to take such action as is possible to ensure that adequate provision is made for the accommodation of cases of small-pox from any and every part of the County.

As regards the records for 1914, information as to the vital statistics is incomplete, but from the particulars which have already come to hand there is reason for believing that the infant death rate keeps about the low figure of the two previous years, though there is still scope for considerable improvement. The year was marked by a general prevalence of scarlet fever, the number of cases being the largest on record.

In this Report I had hoped to include records of independent investigation of housing conditions in various localities, as is contemplated in the Order of the Local Government Board, but the loss of practically all my clerks at very short notice and the instruction of the temporary clerks in their duties so greatly increased my work, that it will readily be realised such investigation has proved impossible. Whilst making these remarks I must acknowledge, and do so most gratefully, that the Medical, Nursing and Clerical staff have borne their share of the burden ungrudgingly, and without this ready and willing assistance it would have been impossible to carry on the duties of my office.

I have the honour to remain, Gentlemen,

Your obedient servant,

J. MIDDLETON MARTIN,

County Medical Officer of Health.

28th July, 1915.

P.S.—The arrival of the five outstanding Reports has rendered it possible for me to complete this Report.

J. M. M.

CHANGES IN STAFF.

Only one permanent change was made among the Medical Officers of Health, namely in the Newent Rural District, where Dr. W. M. L. Johnstone succeeded Dr. Higgins on the 1st October, 1914. On the other hand, the temporary changes occasioned by doctors taking up military duties after the outbreak of war have been numerous and have necessitated making arrangements for carrying on the work. They are:—

West Gloucestershire United Districts—Deputy Surgeon-General Andrews, R.N., was appointed to H.M.S. Mauretania on the 7th August; this appointment was cancelled, but on the 2nd September he was appointed to H.M. Dockyard, Portsmouth, and, subsequently, was attached to ships taking part in actions on the Belgian coast and in the Dardanelles. His deputies are—

Awre, Newnham and Westbury-on-Severn U.D.—Dr.
R. W. Fisher.

East Dean R.D.—Dr. G. F. Rigden.

Gloucester R.D.—Dr. W. M. Hope (M.O.H. City of
Gloucester).

Lydney R.D.—Dr. R. Moyle.

East Gloucestershire United Districts—Dr. M. Ashley—Deputy, Dr. R. Green (1st May, 1915).

South Gloucestershire United Districts—Dr. T. Rhind's deputies from 31st December, 1914, were—

Chipping Sodbury R.D.—Dr. G. R. Gray.

Thornbury R.D.—Dr. L. H. Williams.

Charlton Kings U.D.—Dr. Meyrick-Jones' deputy is Dr. A. B. Cardew (11th April, 1915).

Marston Sicca R.D.—Dr. Thompson's deputy is Dr. H. M. Sampson (19th April, 1915).

Amongst the Sanitary Inspectors I have been informed that Mr. Hook, the inspector for the three river-side Urban Districts, has joined the Royal Army Medical Corps, and that the work of these three districts is being supervised by Mr. Lyne, the inspector for the neighbouring Rural District of East Dean: also that Mr. T. Thorp is acting in the Faringdon R.D. for Mr. Hoddinott, who has joined a Sanitary Company in the Royal Army Medical Corps. Mr. P. Alcock, Stow-on-the-Wold U.D., was also called up for service on the outbreak of war.

The only other changes among the Sanitary Inspectors of which information has so far reached me are:—

Coleford U.D.—Mr. W. H. Davies, in August, 1914, succeeded Mr. H. T. Gwilliam, who was appointed in December, 1913.

Kingswood U.D.—Mr. H. Glynn Warne succeeded Mr. A. H. Brain on the 1st October, 1914.

Gloucester R.D.—Mr. C. B. Barnes was appointed Assistant Sanitary Inspector.

Wheatenhurst R.D.—Mr. Mugliston was appointed on the death of Mr. Daniels at the end of 1913.

RECEIPT AND PRINTING OF REPORTS.

Only 13 of the 35 annual reports were received by the 1st May, as against 19 in 1914. Thirteen more arrived during May, seven during June, and two in July: five had not arrived up to the time most of the following notes were written. There have been special reasons for the delay in the arrival of some of the reports owing to the Medical Officer of Health being engaged on military duty, and this is the cause of the fact that those for the Chipping Sodbury and Thornbury Rural Districts were not received until the end of June. As regards the remaining three, two of the Medical Officers of Health were ill earlier in the year (Stow-on-the-Wold U.D. and Tewkesbury R.D.) The Medical Officer of Health for the fifth district—Warmley R.D.—informed me that he presented his report on the 1st March, 1915, but had been unable to obtain copies from the printers so late as the 9th June: it finally arrived on the 16th July. Some of the medical officers have kindly assisted me, when delay has been unavoidable, by lending me their rough drafts; otherwise this summary would have been still more incomplete than it is.

TABLE I.

Date of Receipt of Report			District					Report printed or not printed
1915								
March	15	...	Charlton Kings Urban	...	...	...	...	Printed
"	27	...	Marston Sicca Rural	...	...	..	...	"
"	31	...	Cirencester Urban...	...	...	...	...	"
"	31	...	Tetbury Urban	...	...	...	...	"
"	31	...	Cirencester Rural	...	...	...	...	"
"	31	...	Tetbury Rural (part of)	...	...	...	...	"
"	31	...	Wheatenhurst Rural	...	...	...	...	"
April	12	...	Campden Rural	...	...	...	...	"
"	14	...	Pebworth Rural	...	...	..	...	"
"	14	...	Winchcombe Rural (part of)	...	...	...	...	"
"	17	...	Cheltenham Borough	...	..	...	...	"
"	23	...	Nailsworth Urban	..	...	...	...	"
"	23	...	Stroud Urban	...	...	...	...	"
May	1	...	Stroud Rural	...	...	...	...	"
"	10	...	Faringdon Rural (part of)	...	...	...	...	"
"	11	...	Coleford Urban	...	...	...	...	"
"	20	...	Cheltenham Rural...	...	..	...	...	"
"	25	...	Awre Urban	...	..	...	...	"
"	25	..	Newnham Urban	...	...	...	...	"
"	25	...	Westbury-on-Severn Urban	...	...	..	...	"
"	25	...	Gloucester Rural	...	...	...	...	"
"	25	...	Lydney Rural	...	...	...	...	"
"	26	...	East Dean and United Parishes Rural...	...	...	...	...	"
"	28	...	Northleach Rural	...	...	...	..	"
"	28	...	West Dean Rural	...	...	...	...	"
"	31	...	Stew-on-the-Wold Rural (part of)	...	...	...	...	"
June	5	...	Dursley Rural	...	...	...	...	"
"	5	...	Newent Rural (part of)	...	...	...	...	Written
"	8	...	Tewkesbury Borough	...	...	...	...	Printed
"	11	...	Kingswood Urban...	...	...	...	...	Stencilled
"	23	...	Stow-on-the-Wold Urban	...	...	...	...	Printed
"	28	...	Chipping Sodbury Rural	...	...	...	...	"
"	28	...	Thornbury Rural	...	...	...	...	"
July	8	...	Tewkesbury Rural (part of)	...	...	...	...	"
"	16	...	Warmley Rural	..	...	...	...	"

TABLE II.

Area of Districts, Houses, Population, Average Number of Persons per 100 Acres, &c.
From Revised Report on Census, 1911, and Assessable Value from County Rate Basis, 1911.

	Area in Acres from 1911 Census.	Assessable Value from County Rate Basis, 1911.			Families or separate Occupiers.		Houses.						Population.				Average No. of Persons.				
							Inhabited.		Uninhabited.		Being Built.		1901.	1911.	1901—1911. Increase or Decrease.		Per 100 Acres, 1911.	Per Inhabited Building.			
		Total.	Per Acre.	1d. Rate.	1901.	1911.	1901.	1911.	1901.	1911.	1901.	1911.			No.	%		1901.	1911.		
Urban Districts—		£	£	£																	
Awre	4,317	9,988	2.3	42	258	264	258	264	35	20	2	2	1,096	1,070	—	26	—	2.4	25	4.25	4.05
Charlton Kings ...	3,399	24,692	7.3	103	885	1,102	874	1,094	37	59	8	11	3,806	4,495	+	689	+	18.1	132	4.35	4.11
Cheltenham	4,726	302,060	63.9	1,258.5	11,036	11,346	10,352	10,623	818	824	57	31	49,439	48,942	—	497	—	1.0	1,036	4.78	4.61
Cirencester	5,286	36,004	6.8	150	1,660	1,756	1,621	1,687	136	64	13	3	7,536	7,631	+	95	+	1.3	144	4.65	4.52
Coleford	2,060	6,468	3.1	27	580	605	579	599	48	38	—	2	2,541	2,604	+	63	+	2.5	126	4.39	4.35
Kingswood	1,530	31,092	20.4	129.5	2,454	2,736	2,446	2,709	196	136	48	3	11,961	12,700	+	739	+	6.2	833	4.89	4.69
Nailsworth	1,596	10,552	6.6	44	762	774	744	769	54	28	—	2	3,028	3,031	+	3	+	.1	190	4.07	3.94
Newnham	1,937	8,988	4.6	37	267	256	266	250	31	39	—	2	1,184	1,021	—	163	—	13.8	53	4.45	4.08
Stow-on-the-Wold ...	45	3,452	76.7	14	335	339	325	334	40	21	1	2	1,386	1,301	—	85	—	6.1	2,891	4.26	3.90
Stroud	1,168	35,772	30.6	149	2,004	2,052	2,003	2,024	209	130	8	6	9,153	8,767	—	386	—	4.2	750	4.57	4.33
Tetbury	114	5,636	49.4	24	464	452	454	445	40	40	1	—	1,989	1,758	—	231	—	11.6	1,542	4.38	3.95
Tewkesbury	2,532	22,661	8.95	94	1,251	1,266	1,226	1,204	105	73	5	1	5,419	5,287	—	132	—	2.4	209	4.42	4.39
Westbury-on-Severn ...	8,257	17,448	2.1	73	424	401	422	400	47	53	—	1	1,866	1,812	—	54	—	2.9	22	4.42	4.53
Total—Urban Districts	36,967	514,816	13.9	2,145	22,380	23,349	21,570	22,402	1,796	1,525	143	66	100,404	100,419	+	15	+	.015	271.5	4.65	4.48
Rural Districts—																					
Campden	23,726	31,912	1.3	133	1,345	1,370	1,319	1,363	148	98	14	—	5,441	5,597	+	156	+	2.9	24	4.13	4.11
Cheltenham	18,401	37,216	2.0	155	1,046	1,239	1,034	1,226	60	94	6	26	4,637	5,254	+	617	+	13.3	28.5	4.48	4.29
Chipping Sodbury ...	69,736	113,192	1.6	472	4,951	4,919	4,888	4,860	317	323	15	8	22,104	20,955	—	1,149	—	5.2	30	4.52	4.31
Cirencester	80,991	58,772	.7	245	2,918	3,081	2,931	3,059	216	125	10	10	12,081	12,746	+	662	+	5.5	16	4.12	4.17
Dursley	26,876	57,212	2.1	238	2,801	3,000	2,753	2,928	248	177	5	11	11,636	12,233	+	597	+	5.1	46	4.23	4.18
East Dean and United Parishes	28,626	65,180	2.3	272	4,355	4,494	4,305	4,463	290	250	9	6	20,011	19,952	—	59	—	0.3	70	4.65	4.47
Faringdon (part of) ...	3,870	5,324	1.4	22	272	279	271	277	33	10	2	1	1,179	1,167	—	12	—	1.0	30	4.35	4.21
Gloucester	30,680	86,192	2.8	359	2,153	2,594	2,062	2,578	172	157	33	23	10,779	12,615	+	1,836	+	17.0	41	5.23	4.89
Lydney	24,554	52,476	2.1	219	1,908	2,054	1,867	1,998	136	103	7	3	8,649	9,005	+	356	+	4.1	37	4.63	4.51
Marston Sicca	8,823	7,832	.9	33	385	403	384	398	24	47	2	3	1,485	1,609	+	124	+	8.4	18	3.87	4.04
Newent (part of) ...	35,540	39,780	1.1	166	1,658	1,669	1,649	1,632	133	122	2	1	7,067	6,964	—	103	—	1.5	20	4.29	4.27
Northleach	70,018	34,612	.5	144	1,971	1,995	1,931	1,972	195	156	5	1	8,100	8,056	—	44	—	0.5	11.5	4.19	4.09
Pebworth	17,326	17,508	1.0	73	703	766	693	739	62	47	—	1	2,944	3,239	+	295	+	10.0	19	4.25	4.38
Stow-on-the-Wold (part of)	42,203	34,772	.8	145	1,527	1,609	1,515	1,599	226	108	3	7	6,473	6,803	+	330	+	5.1	16	4.27	4.25
Stroud	37,223	107,956	2.9	450	6,740	7,023	6,635	7,005	613	477	18	29	27,793	28,068	+	275	+	1.0	75	4.19	4.01
Tetbury (part of) ...	26,300	19,700	.75	82	865	902	855	895	75	65	—	—	3,800	3,913	+	113	+	3.0	15	4.44	4.37
Tewkesbury (part of) ...	28,366	38,008	1.3	158	1,233	1,256	1,199	1,229	104	101	1	4	4,986	5,074	+	88	+	1.8	18	4.16	4.13
Thornbury,	64,241	135,328	2.1	564	4,253	4,427	4,200	4,358	276	217	14	13	18,487	19,079	+	592	+	3.2	30	4.40	4.38
Warmley	10,089	53,096	5.3	221	3,396	3,809	3,367	3,774	207	265	86	11	15,915	17,188	+	1,243	+	7.8	170	4.74	4.55
West Dean	21,469	33,352	1.55	139	2,768	2,975	2,742	2,892	122	118	10	13	12,624	13,454	+	830	+	6.6	63	4.60	4.65
Wheatenhurst	24,462	43,260	1.8	180	1,505	1,518	1,496	1,511	149	173	3	2	6,105	6,093	—	12	—	0.2	25	4.08	4.03
Winchcombe (part of) ...	55,529	48,116	.9	200.5	2,083	2,272	2,048	2,255	192	136	4	1	8,709	9,531	+	822	+	9.4	17	4.25	4.23
Total—Rural Districts	749,049	1,120,796	1.5	4,670.5	50,866	53,654	50,144	53,011	4,028	3,369	219	174	221,038	228,595	+	7,557	+	3.4	30.5	4.41	4.31
Administrative County																					
Bristol	17,460	—	—	—	73,177	80,312	60,079	67,426	5,603	5,532	760	161	339,042	357,048	+	18,006	+	5.3	2,061	5.64	5.30
Gloucester	2,318	—	—	—	10,342	11,130	10,098	10,781	625	626	100	32	47,955	50,035	+	2,080	+	4.3	2,161	4.75	4.64
Whole County	805,794	—	—	—	156,765	168,445	141,891	153,620	12,052	11,052	1,252	433	708,439	736,097	+	27,658	+	3.9	91	4.99	4.79
England and Wales ...	37,337,537	—	—	—	7,036,868	8,005,290	6,260,852	7,141,781	448,932	408,652	61,909	38,178	32,527,843	36,070,492	+	3,542,649	+	10.9	97	5.20	5.05

POPULATION.

The population and various other particulars of the various districts in the County will be found in Table II. which I reproduce from my previous Report for convenience of reference. In that Report I also gave a table showing the numbers and percentages of persons engaged in various occupations.

The populations of the County and of the contained Urban and Rural Districts, estimated to the middle of 1914, are as follows :—

				Census 1901		Census 1911		Estimated Population— Middle of 1914	
								By District M.O.H.	County Estimate
Urban	...	...	...	100,404	...	100,419	...	101,426	100,425
Rural	...	...	...	221,038	...	228,595	...	230,874	231,150
				<hr/>		<hr/>		<hr/>	<hr/>
Administrative County				321,442	...	329,014	...	332,300	331,575
				<hr/>		<hr/>		<hr/>	<hr/>

For the last four months in the year the male population was probably much below the usual figure owing to the absence of men of military age on active service: as it is impossible to make correction for them, the rates for the County have been based on the last figures above given. The district rates are calculated on the population for each district estimated by the respective Medical Officers of Health.

VITAL STATISTICS.

The numbers of births (legitimate and illegitimate) and the death rates for various diseases are given in Table III., and the numbers of deaths at the various age groups and from specified diseases during 1914 in Table IV. (A) and (B).

Corrections have been made in the various reports for transferable births and deaths but these corrections do not invariably agree with those of the Registrar-General. The total deaths registered in the County was 4,108, and of these 254 were regarded by the Registrar-General as transferable to some other district than that in which each occurred; the number regarded by the Medical Officers of Health as so transferable was 350, nearly 100 in excess. The number of persons belonging to the County dying in institutions, &c., beyond the County was 448, and of these 440 are accounted for in the tables. The net result is that, with the corrections made by the Registrar-General, the total number of deaths distributed in Tables IV. (A) and (B) should have been 4,302, *i.e.*, 104 more than the totals there given. This mainly arises owing to the omission of deaths from the tables for Cheltenham Borough, and Stroud Urban and Gloucester Rural Districts.

BIRTH RATES.

The total number of births was 6,216, the lowest in any year and 187 below that in 1912 the previous recorded minimum. The rate per 1,000 of the population was 18.75 while that for England and Wales was 23.6. The steady

TABLE III.—RATES, &c.

DISTRICTS.	Estimated Population	BIRTHS				DEATHS					DEATH RATES												
		Number			Rate	Number	Rate	Factor for Correction	Corrected Rate	Infantile Mortality Rate	Zymotic	Small- pox	Scarlet Fever	Diphtheria and Croup	"Fever"	Measles	Whooping Cough	Diarrhoea and Enteritis	Respiratory	Phthisis	Other Tuber- cular	Cancer	
		Legiti- mate	Illegit- mate	Total																			
URBAN DISTRICTS—																							
Awre	1,061	16	...	16	15.0	15	11.1	.8980	12.7	62	2.81	...	.94	...	...	...	1.87	...	.91	...	...	...	1.87
Charlton Kings	4,740	77	4	81	17.01	55	11.6	.8742	10.1	75	.02	...	...	.02	...	...	...	...	.12	.08	.04	...	.18
Cheltenham	49,500	741	50	791	15.9	695	14.0	.8709	12.2	86	.64	...	.02	.24	.08	...	.04	.26	1.98	.81	.22	...	1.25
Cirencester	7,662	115	7	122	15.9	112	14.6	.8979	13.1	82	1.04	...	...	.65	...	...	.26	.13	2.21	.26	.13	...	1.95
Coleford	2,624	61	3	64	24.3	36	13.7	.8434	11.6	78	.38	...	...	...	.38	...	...	...	1.90	.76	.38	...	...
Kingswood	12,958	258	7	265	20.4	113	11.0	1.0765	11.8	53	.85	...	...	.46	...	...	...	.39	1.93	.77	.08	...	1.31
Nailsworth	3,109	50	1	51	16.4	40	12.8	.8736	11.2	78	.32	...	...	...	...	...	.32	...	1.61	.32	...	...	.32
Newnham	969	20	...	20	20.6	16	16.5	.8475	14.0	...	...	...	...	...	...	...	...	...	3.1	...	...	...	1.03
Stow-on-the-Wold	1,290	26	1	27	20.9	16	12.4	.8862	11.0	74	...	...	...	...	...	...	...	...	1.55	...	...	...	.775
Stroud	8,767	150	2	152	17.3	138	15.7	.8831	13.9	72	2.62	...	.11	.80	...	1.03	.11	.57	2.17	.68	.23	...	1.14
Tetbury	1,689	39	...	39	23.0	26	15.3	.7901	12.1	51	1.77	...	...	...	...	...	1.77	...	3.54	1.15	.59	...	1.15
Tewkesbury	5,260	101	6	107	20.3	56	10.6	.8710	9.2	37	.19	...	...	...	...	...	...	.19	1.14	1.14	.57	...	1.14
Westbury-on-Severn	1,797	34	2	36	20.0	26	14.4	.7039	10.1	28	.56	...	...	...	...	...	.56	...	...	.56	...	...	.56
Total Urban Districts	* 100,425	1,688	83	1,771	17.6	1,374	13.7	.8861	12.1	72	.86	...	.03	.31	.05	.09	.12	.26	1.92	.74	.22	...	1.26
RURAL DISTRICTS—																							
Campden	5,655	93	...	93	16.4	81	14.3	.8206	11.7	75	1.40	...	...	.17	.35	...	.35	.53	.70	1.2	...	...	1.9
Cheltenham	5,440	90	4	94	17.2	70	12.7	.8877	11.3	95	.74	...	...	.37	...	...	.37	...	.74	1.47	...	...	.18
Chipping Sodbury	20,493	342	14	356	17.3	248	12.1	.8568	10.4	78	.51	...	.05	.15	.05	...	.05	.24	2.15	.24	.15	...	1.22
Cirencester	12,946	220	8	228	17.6	171	13.2	.8488	11.2	61	.69	...	...	.46	...	...	...	.23	1.70	.60	.30	...	1.30
Dursley	12,437	224	6	230	18.5	146	11.8	.8599	10.1	78	.96	...	.08	.40	.24	.08	.08	.08	1.92	.40	.08	...	.64
East Dean and United Parishes	19,933	507	20	527	26.4	267	13.4	.8938	12.0	80	.70	...	.10	.20	.10	...	.15	.15	2.01	.55	.35	...	.60
Faringdon (part of)	1,163	16	...	16	13.8	18	15.5	.8522	13.2	62	...	...	...	...	...	...	...	...	2.58	.86	...	...	2.58
Gloucester	13,230	223	3	226	17.0	104	7.9	.8848	7.0	40	.455	...	...	.23	...	...	.15	.075	.91	.60	.075	...	1.06
Lydney	9,122	177	9	186	20.3	113	12.2	.9236	11.3	53	.48	...	.12	.12	.12	...	...	.12	1.71	.37	.24	...	1.22
Marston Sicca	1,650	29	1	30	18.1	17	10.3	.7638	7.9	33	.60	...	.60	...	...	...	...	...	2.60	.60	...	...	.60
Newent (part of)	6,938	99	3	102	14.7	111	15.6	.7778	12.1	59	.72	...	.14	.29	...	...	.14	.14	1.87	.43	.29	...	.72
Northleach	8,056	147	11	158	19.6	93	11.6	.7977	9.3	65	.37	...	...	...	.12	...	...	.25	.74	.74	.12	...	1.37
Pebworth	3,311	56	2	58	17.8	43	13.0	.8052	10.5	51	.60	...	.30	.30	...	...	...	...	3.62	.30	...	...	.90
Stow-on-the-Wold (part of)	6,927	126	13	139	20.07	96	13.9	.8029	11.1	137	.43	...	.14	...	...	...	.14	.14	2.31	.43	.29	...	.58
Stroud	28,281	455	11	466	16.4	382	13.5	.8706	11.8	61	.85	...	.21	.39	...	.14	...	.11	1.06	.81	.18	...	1.94
Tetbury (part of)	3,946	58	7	65	16.4	40	10.1	.9331	9.4	30	...	...	...	...	...	...	...	...	1.20	.76	...	...	.76
Tewkesbury (part of)	5,074	98	2	100	19.6	55	10.8	.7987	8.6	70	.59	...	...	...	...	...	...	.59	2.35	.78	...	...	.39
Thornbury	19,283	370	11	381	19.7	212	11.0	.8690	9.5	68	.47	...	...	.16	...	...	.26	.05	1.04	.47	.21	...	1.14
Warmley	17,618	321	15	336	19.1	200	11.35	.9826	11.2	101	.28	...	...	.06	...	.06	.11	.06	2.11	.85	.28	...	2.11
West Dean	13,750	372	18	390	28.36	170	12.5	.9087	11.4	90	1.01	...	...	.14	...	...	.38	.49	2.25	.58	...	...	.65
Wheatenurst	6,090	102	3	105	17.2	83	13.6	.8055	11.9	104	.48	...	...	.16	...	...	...	.32	3.11	.32	.16	...	.48
Winchcombe (part of)	9,531	151	8	159	16.7	104	10.9	.8344	9.1	75.5	.105	...	...	.105	...	...	...	...	1.40	.52	...	...	1.05
Total Rural Districts	* 231,150	4,276	169	4,445	19.2	2,824	12.2	.8653	10.6	76	.60	...	.06	.21	.04	.03	.11	.15	1.67	.60	.17	...	1.06
Administrative County	* 331,575	5,964	252	6,216	18.75	4,198	12.7	.8715	11.1	75	.68	...	.05	.24	.05	.05	.11	.18	1.75	.64	.18	...	1.12

*County Estimates

TABLE IV. (A)—URBAN DISTRICTS.

1914.

L.G.B.—TABLE III.—CAUSES OF AND AGES AT DEATH.

CAUSES.	All ages	Under 1 year	1—2 years	2—5 years	5—15 years	15—25 years	25—45 years	45—65 years	65 years and over	Public Institutions	Avre	Charlton Kings	Cheltenham	Cirencester	Coleford	Kingswood	Nailsworth	Newnham	Stow-on-the-Wold	Stroud	Tetbury	Tewkesbury	Westbury-on-Severn
Uncertified	6	3	...	1	...	...	...	1	1	...	...	...	5	...	...	...	1	...	...	...	...	...	...
Enteric Fever	5	...	...	1	...	1	2	...	1	2	...	...	4	...	1	...	...	...	...	...	...	...	...
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	9	...	2	7	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	9	...	...	...
Scarlet Fever	3	...	...	1	2	...	...	...	...	1	1	...	1	...	...	...	...	...	...	1	...	...	...
Whooping Cough	12	4	3	4	1	...	...	...	...	...	2	...	2	2	...	...	1	...	...	1	3	...	1
Diphtheria and Croup	31	...	...	11	17	2	1	...	...	17	...	1	12	5	...	6	...	...	...	7	...	...	...
Influenza	25	1	1	...	...	2	3	5	13	1	...	...	11	7	...	1	...	...	...	6	...	...	...
Erysipelas	3	...	...	...	...	...	1	...	2	1	...	...	1	...	...	...	...	...	...	...	...	1	1
Phthisis	74	...	...	2	4	14	30	18	6	17	...	4	40	2	2	10	1	...	...	6	2	6	1
Tuberculous Meningitis	9	...	1	1	4	2	1	...	...	5	...	...	4	1	...	1	...	...	...	1	...	2	...
Other Tuberculous Diseases	13	2	1	1	2	1	4	1	1	8	...	2	7	...	1	...	...	...	...	1	1	1	...
Cancer, Malignant disease	127	...	...	...	...	2	5	49	71	43	2	9	62	15	...	17	1	1	1	10	2	6	1
Rheumatic Fever	3	...	...	...	...	1	1	1	...	2	...	...	1	1	...	...	...	...	...	1	...	...	...
Meningitis	12	3	...	2	2	2	1	1	1	2	...	1	6	...	1	3	...	...	...	...	...	1	...
Cerebro-Spinal Meningitis	2	1	...	...	...	...	1	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...
Organic Heart Disease	137	...	...	...	2	3	7	44	81	22	1	5	85	7	5	17	...	1	1	...	3	7	5
Bronchitis	86	4	...	...	...	...	3	9	70	16	...	2	41	7	1	10	4	2	1	8	6	4	...
Pneumonia (all forms)	93	9	6	7	6	1	10	25	29	25	...	4	51	9	4	12	1	1	1	9	...	1	...
Other Diseases of Respiratory Organs	14	1	...	...	...	...	2	2	9	1	1	...	6	1	...	3	...	...	...	2	...	1	...
Diarrhea and Enteritis	26	18	2	1	...	...	...	...	5	8	...	...	14	1	...	5	...	...	...	5	...	1	...
Appendicitis and Typhlitis	12	...	2	2	2	...	2	2	2	6	...	1	6	2	...	...	...	...	1	...	...	1	1
Cirrhosis of Liver	11	...	...	...	...	...	3	6	2	4	...	...	5	...	1	2	...	1	...	2	...	...	...
Alcoholism	4	...	...	...	...	...	2	1	1	1	...	...	1	...	...	...	1	...	...	1	1	...	...
Nephritis and Bright's Disease	54	...	...	...	1	...	5	20	28	12	1	2	37	3	2	1	1	1	1	2	...	1	2
Puerperal Fever	1	...	...	...	...	1	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...
Other Accidents and diseases of Parturition	6	...	...	...	...	...	6	...	...	1	...	...	1	2	1	...	...	...	...	1	...	...	1
Congenital Debility, and Malformation and Premature Birth	64	61	1	2	...	...	...	...	...	8	...	3	36	4	3	5	3	...	2	5	1	2	...
Violent Deaths (excluding suicides)	41	4	1	2	5	3	7	9	10	17	2	2	17	4	1	4	4	...	...	3	...	2	2
Suicides	11	...	...	...	...	...	4	6	1	2	...	...	7	...	...	...	1	1	...	2	...	...	...
Other Defined Diseases	444	17	5	1	5	5	21	87	303	123	4	15	232	36	4	36	21	8	8	53	7	19	1
Polio-myelitis	1	...	...	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Diseases, ill-defined or unknown	41	3	...	...	...	...	1	7	30	11	1	2	3	3	9	10	1	...	...	2	...	...	10
TOTAL	1374	128	25	46	53	40	123	293	666	360	15	55	695	112	36	143	40	16	16	138	26	56	26

TABLE IV. (B)—RURAL DISTRICTS.

1914.

L.G.B. TABLE III.—CAUSES OF AND AGES AT DEATH.

CAUSES.	All ages	Under 1 year	1-2 years	2-5 years	5-15 years	15-25 years	25-45 years	45-65 years	65 years and over	Public Institutions	Camden	Cheltenham	Chipping Sodbury	Cirencester	Dursley	East Dean and United Parishes	Faringdon (part of)	Gloucester	Lydney	Marston Sicca	Newent (part of)	Northleach	Pebworth	Stow-on-the-Wold (part of)	Stroud	Tetbury (part of)	Tewkesbury (part of)	Thornbury	Warmley	West Dean	Wheatonhurst	Winchcombe (part of)
Uncertified	9*	2	...	...	...	...	...	1	3	...	...	...	...	3	...	1	...	3*	...	1	...	...	...	...	...	...	...	1	...	...	...	...
Enteric Fever	10	...	...	...	2	3	3	2	...	4	2	...	1	...	3	2	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...
Small-pox ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	7	...	3	1	2	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	1	...	...	...	4	...	...	...	1	...	...	...
Scarlet Fever	15	1	1	5	8	...	...	...	...	11	...	...	1	...	1	2	...	...	1	1	1	...	1	1	6	...	...	...	...	...	...	...
Whooping Cough... ..	25	16	3	6	...	...	...	...	...	...	2	2	1	...	1	3	...	2	...	...	1	...	...	1	...	...	...	5	2	5	...	...
Diphtheria and Croup	47	...	3	11	29	3	1	...	...	29	1	2	3	6	5	4	...	3	1	...	2	...	1	...	11	...	...	3	1	2	1	1
Influenza	55	4	1	...	1	5	5	9	30	1	...	1	1	3	3	2	2	1	5	...	1	3	...	4	13	1	1	4	1	2	2	5
Erysipelas	5	...	...	...	...	...	...	1	4	...	...	...	1	...	...	1	...	...	...	...	2	...	1	...	...	...	...	...	...	...	...	...
Phthisis	139	...	1	1	2	34	63	29	9	24	7	8	5	8	5	11	1	8	3	1	3	6	1	3	23	3	4	9	15	8	2	5
Tuberculous Meningitis	7	2	...	4	1	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...	...	...	1	1	...	...	...	2	...	...	...
Other Tuberculous Diseases	32	4	...	1	6	8	10	1	2	4	...	...	3	4	...	6	...	1	1	...	2	1	...	1	4	...	...	4	3	...	1	1
Cancer, Malignant Disease	245	...	...	1	...	1	25	93	125	9	11	1	25	17	8	12	3	14	10	1	5	11	3	4	55	3	2	22	16	9	3	10
Rheumatic Fever... ..	8	...	...	...	2	1	2	2	1	1	...	...	1	...	...	...	...	1	1	...	2	...	...	1	1	...	...	...	...	...	...	1
Meningitis	18	3	1	3	6	3	...	1	1	...	...	...	...	...	1	2	...	...	1	...	...	1	2	1	...	...	...	3	6	1	...	...
Cerebro-Spinal Meningitis	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Organic Heart Disease	382	1	1	...	4	6	14	108	248	47	7	14	38	27	12	55	3	25	20	3	21	7	3	15	...	3	11	44	23	18	14	16
Bronchitis	203	18	1	4	...	...	6	32	142	9	2	1	22	15	12	18	3	7	8	2	6	1	2	7	21	3	8	6	27	17	11	4
Pneumonia (all forms)	147	28	12	8	4	8	22	30	35	14	2	3	22	8	8	17	...	5	3	2	5	5	8	8	8	1	3	11	7	7	7	7
Other Diseases of Respiratory Organs	36	3	1	3	1	...	5	8	15	4	...	...	...	...	4	5	...	...	3	...	2	...	2	1	1	1	1	3	3	7	1	2
Diarrhea and Enteritis	35	28	4	1	1	...	...	...	1	1	3	...	5	3	1	3	...	1	1	...	1	2	...	1	3	...	3	1	1	4	2	...
Appendicitis and Typhlitis	16	...	...	...	3	4	5	3	1	3	...	1	2	3	1	...	...	1	1	...	...	...	...	...	4	...	...	...	...	1	1	1
Cirrhosis of Liver	30	...	...	...	...	...	1	21	8	2	...	1	7	1	2	...	...	1	3	...	2	...	...	1	5	1	...	4	1	...	...	1
Alcoholism... ..	6	...	...	...	...	...	1	5	...	2	...	...	2	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
Nephritis and Bright's Disease	101	...	2	1	3	...	12	41	42	11	4	5	12	3	9	5	...	3	4	...	3	5	...	4	10	2	2	9	8	4	4	5
Puerperal Fever	2	...	...	...	...	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Other Accidents and Diseases of Parturition	16	...	...	...	...	1	15	...	...	...	1	...	...	2	1	2	...	...	...	...	...	1	1	...	1	...	...	3	2	1	...	1
Congenital Debility, and Malformation and Premature Birth	173	168	3	...	2	...	...	...	...	4	3	7	12	6	11	25	...	5	5	2	4	4	1	14	17	1	5	15	12	12	4	8
Violent Deaths (excluding suicides)	92	11	3	6	4	7	23	22	16	5	3	4	9	3	2	11	...	3	6	...	1	6	1	4	9	1	2	8	8	7	2	2
Suicides	19	...	...	...	...	2	7	10	...	...	3	...	2	2	...	...	...	1	...	1	1	...	1	...	2	1	1	1	2	1	...	...
Other defined Diseases	766	34	10	5	11	16	60	158	472	83	26	13	49	45	53	61	6	18	27	1	30	39	7	13	166	16	12	53	40	43	23	25
Polio-myelitis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases ill-defined or unknown	186	15	1	1	5	1	6	17	140	19	3	7	24	14	1	18	...	4	7	3	12	...	7	11	16	3	...	4	18	20	4	10
TOTAL	2824	336	51	62	97	105	287	594	1292	288	81	70	248	171	146	267	18	104	113	17	111	93	43	96	382	40	55	212	200	170	83	104

* 3—Ages not given.

fall in the birth rate for the whole country is shown in the following table, and the general tendency in the County is seen to be in the same direction though somewhat less regular.

TABLE V.
BIRTH RATES.

Revised on 1911 Census.

	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905	1904	1903
Urban	17.6	18.3	17.6	20.0	20.2	21.1	20.5	20.3	21.8	22.4	21.8	23.7
Rural	19.2	20.2	20.2	20.9	21.3	21.85	23.2	22.1	23.4	23.6	23.45	24.9
Administrative County	18.75	19.6	19.1	20.6	20.95	21.6	22.4	21.6	22.9	23.25	22.95	24.6
England and Wales ...	23.6	23.9	23.8	24.4	24.8	25.6	26.5	26.3	27.1	27.2	27.9	28.4

The districts with the highest average rates for the 10 years (1901-10) were West Dean Rural (30.8), East Dean Rural (28.5), Kingswood Urban (27.5), Lydney Rural (26.7), Warmley Rural (26.7), Coleford Urban (26.42) and Pebworth Rural (26.3) Districts, and with the lowest rates, Cheltenham Borough (19.6) and Stroud Rural (19.5), Newnham Urban (19.3), and Cheltenham (19.1), Gloucester (19.0), Marston Sicca (18.9) and Tetbury (18.5) Rural Districts.

ILLEGITIMATE BIRTHS.

Two hundred and fifty-two of the 6,216 births were illegitimate, that is 4.1% of total births; it is doubtful if information is complete, and it is possible that this figure

should be a little higher. Unfortunately, owing to the absence of Medical Officers of Health on military duty, I have not been able to obtain any necessary corrections. The proportions for urban and rural districts separately for 1914 and previous years are given in the following table:—

TABLE VI.

% ILLEGITIMATE BIRTHS.

	1911		1913		1912		1911		1910		1909	
Urban Districts	...	4.7	...	5.4	...	4.5	...	6.4	...	5.8	...	4.9
Rural Districts	...	3.8	...	3.7	...	3.5	...	4.2	...	3.6	...	3.2
Administrative County	...	4.1	...	4.2	...	3.8	...	4.9	...	4.3	...	3.8
England and Wales	...	—	...	4.3	...	4.3	...	4.3	...	4.1	...	4.1

(Prior to 1912 certain districts have been omitted from the above Table, as the information was not available.)

DEATH RATES.

The number of deaths accounted for in Tables IV. (A) and (B) is 4,198, 40 more than the minimum recorded in 1912, and about 120 less than the number in 1913. There is little in this table to call for comment beyond a marked rise (in both Urban and Rural Districts) in the numbers of deaths from diphtheria (a record maximum of 78) and from bronchitis and pneumonia, but the numbers for the two latter in 1913 were almost the lowest recorded.

The following table giving the rates for 1914 and previous year shows that the death rates for this County,

especially when corrected for the age and sex distribution of the population, compare favourably with those for the country as a whole. The detailed rates for the districts will be found in Table III.

TABLE VII.
DEATH RATES
revised on Census 1911.

	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905	1904	1903
Urban	13.7	14.1	12.6	14.1	12.6	15.0	13.7	14.2	14.5	15.0	13.6	11.0
Rural	12.2	12.6	12.6	13.0	12.9	13.0	12.35	13.4	12.9	13.9	13.0	12.8
Administrative County	12.7	13.05	12.6	13.3	12.8	13.6	12.8	13.6	13.4	14.2	13.2	13.2
Ditto, corrected for Sex and Age Distribution	11.1	11.4	11.0	11.8	11.4	12.1	11.4	12.1	11.9	12.6	11.7	11.7
England and Wales ...	13.6	13.4	13.3	14.6	13.4	14.5	14.7	15.0	15.4	15.2	16.2	15.4

A careful analysis has been made of the death rates for different diseases and groups of diseases in the various districts in the County during the 10 years, 1901-10, and forms the subject of an enquiry which is now being conducted. It is hoped that it may be possible to give a summary of the results in the next issue of this Report.

INFANTILE MORTALITY.

The following table shows a slight increase in the infantile death rate from 73 in 1913 to 75 in 1914, due entirely to a rise in the rural districts; in urban districts the rate almost reached the record low mortality of 1912:—

TABLE IX.
INFANTILE MORTALITY.

	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905
Urban	72	90	70	114	86	103	97	98	93	116
Rural	76	67	73	87	72	72	77	76	77	94
Administrative County	75	73	72	95	76	81	83	82	81	100
England and Wales ...	105	109	95	130	106	109	121	118	132	128
Worcestershire ...		97	89	116	89	102	99	106	115	106
Warwickshire ...		88	79	115	89	97	100	99	124	109

The fall in the numbers of infant deaths in urban districts occurred chiefly at ages under two months, and from infectious conditions (except whooping cough) and pneumonia. The incidence of the increase in rural districts was particularly on infants under the age of two weeks and those aged 6 to 12 months; the causes of death showing increases were chiefly whooping cough, enteritis and congenital defects. Comparatively low though the rate for the County is, there is little doubt but that if every infant were given a fair chance the mortality could easily be reduced by one half.

The following table, comparing the mortality among legitimate and illegitimate infants, shows as usual the very excessive rate amongst the latter, and that the possibilities of saving life are even greater amongst illegitimate than amongst legitimate infants:—

TABLE VIII. (A)—URBAN DISTRICTS.

1914.

L.G.B. TABLE IV.—INFANTILE MORTALITY.

CAUSES					Total under 1 month					Total under 1 year													
	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks		1-3 months	3-6 months	6-9 months	9-12 months		Avre	Charlton Kings	Cheltenham	Cirencester	Coleford	Kingswood	Nailsworth	Newnham	Stow-on-the-Wold	Stroud	Tetbury	Tewkesbury	Westbury-on-Severn
Uncertified	2	1			3					3			3										
Illegitimate										9			7	1							1		
Small-pox																							
Chicken-pox																							
Measles																							
Scarlet Fever																							
Whooping Cough								1	3	4	1			2								1	
Diphtheria and Croup																							
Erysipelas																							
Tuberculous Meningitis																							
Abdominal Tuberculosis						1				1											1		
Other Tuberculous Diseases								1		1			1										
Meningitis (not Tuberculous)							1	2	1	4		1	2		1								
Convulsions			1		1			3		4			3			1							
Laryngitis																							
Bronchitis				1	1	1	2		1	5			1			3			1				
Pneumonia (all forms)						4	2	1	1	8		1	5		1	1							
Diarrhoea							1	1	1	3			2								1		
Enteritis						5	4	4	2	15			10			2				3			
Gastritis								1		1									1				
Syphilis						1		1		2			2										
Rickets									1	1										1			
Suffocation, overlying	1				1		1	1		3			2						1				
Injury at Birth																							
Atelectasis	3				3					3			1			1					1		
Congenital Malformation	4	2	1	1	8					8			3		1	3					1		
Premature Birth	19	6	2	1	28				1	29		3	18	1	2	2			1	2			
Atrophy, Debility and Marasmus	6	2	2	1	11	7	6		1	25			13	3		2	2			4	1		
Other causes	1				1	3	1	3	3	11		1	5	4		1							
TOTAL	34	10	6	4	54	22	18	19	15	128	1	6	68	10	5	14	4		2	11	2	4	1

TABLE XI. (B)—RURAL DISTRICTS.

1914.

L.G.B. TABLE II.—NOTIFIABLE INFECTIOUS DISEASE.

DISEASE.	At all ages	AT AGES—YEARS							Total cases removed to Hospital	Camden	Cheltenham	Chipping Sodbury	Cirencester	Dursley	East Dean	Faringdon (part of)	Gloucester	Lydney	Marston Sica	Newent (part of)	Northleach	Pebworth	Stow-on-the-Wold (part of)	Stroud	Tetbury (part of)	Tewkesbury (part of)	Thornbury	Warnley	West Dean	Wheatenurst	Winchcombe (part of)	
		Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards																								
Cases removed to Hospital									605		27	18	29	24	143		17	60	11	1	24	27	2	151		18		27		1	25	
Small-pox																																
Cholera																																
Plague																																
Diphtheria (including Membranous Croup)	381	3	69	216	53	31	9		106	3	9	23	32	102	14		15	3	2	8	1	1		72			49	18	21	5	3	
Erysipelas	94*		1	2	8	25	29	22	1	2	3	23	2*	2	10		1	5		6*	2		4	6		2	9	10		3	4	
Scarlet Fever	1177†	8	216	781	109	51	8	1	491	10	23	156	42†	32	208		61	75	11	60	24	34	17	166	1	21	58	59	61	35	23	
Typhus Fever																																
Enteric Fever	29			6	13	9	1		7	2		5		4	5		4	1			1					1		2		3	1	
Relapsing Fever																																
Continued Fever																																
Puerperal Fever	5				1	4				1				1								1				1			1			
Cerebro-Spinal Meningitis	1		1														1															
Polio-Myelitis	1			1																												
Ophthalmia Neonatorum	14	14										1		2	2		1	1										1	1	1		
Pulmonary Tuberculosis	315†		10	44	75	130	46	4		11	4	18	6	12	44	1	17	6		6‡	4	1	6	72	3	3	27	35	27	6	6	
Other forms of Tuberculosis	77	3	6	30	18	18	1	1		3	1	5	1	8	8		3	1					2	5	2		11	20	6		1	
TOTALS	2094	28	303	1080	277	268	94	28	605	32	40	231	83	163	291	1	103	92	13	80	33	37	29	321	7	27	158	143	120	50	40	

* No age given—Cirencester 1, Newent 6.

† No age given—Cirencester 3.

‡ No age given—Newent 6.

TABLE X.

LEGITIMATE AND ILLEGITIMATE INFANTILE MORTALITY.

			URBAN DISTRICTS		RURAL DISTRICTS		COUNTY	
			Leg.	Illeg.	Leg.	Illeg.	Leg.	Illeg.
1906	...	...	86	264	70	216	75	235
1907	...	...	94	141	73	161	79	152
1908	...	...	97	101	73	127	80	116
1909	...	...	97	223	75	169	82	191
1910	...	...	84	119	69	106	74	112
Average 1906-1910			87	152	64	124	71	135
1911	...	...	104	180	91	133	95	152
1912	...	...	69	112.5	73	93	71	100
1913	...	...	82	220	66	99	70	143
1914	...	...	70	108	72	177.5	71	155

(Certain districts have been omitted before 1912 as the information is not available.)

The directions in which improvement may be looked for are two, namely, attention to sanitary conditions (including the prompt removal of all refuse affording breeding places for flies) and proper care and management of infants.

The Local Government Board have frequently called attention to these matters and the County Council have endeavoured to supplement their efforts; there is room, however, for very great improvement in both directions. Additional incentive to undertake work is given by the arrangement under which grants, up to one-half the expenditure, will be paid, by either the Local Government Board or the Board of Education, in aid of Maternity Centres and Schools for Mothers. The Education Committee have for some years had Home-making Centres where use-

ful instruction on the management of homes is given, and have also arranged classes in the Elementary Schools. Recently, a Conference of the Committees of the County Council concerned and of the County Nursing Association, approved of a comprehensive scheme for the provision of Health Visitors and Centres for care of Mothers and Children, and it is hoped that some work may be done on these lines in the near future.

NOTIFIABLE DISEASES.

The return issued by the Local Government Board shows that during 1914 there was a general rise in the prevalence of notifiable infectious diseases in England and Wales, particularly of scarlet fever. A similar increased prevalence occurred in this County, the number of cases of scarlet fever being the maximum recorded in any year. The same conditions were experienced in all the surrounding counties, with the following chief exceptions. In Worcestershire and Herefordshire there was less scarlet fever than in the previous year, and the prevalence of diphtheria in Herefordshire was low and about the same as in 1913.

Details of the distribution of the cases during 1914 will be found in Tables XI. (A) and (B), and the average fatality of various diseases in the following Table :—

TABLE XL (A)—URBAN DISTRICTS.

1914.

L.G.B. TABLE II.—NOTIFIABLE INFECTIOUS DISEASE.

DISEASE	At all ages	AT AGES—YEARS.							Total cases removed to Hospital	Ayre	Charlton Kings	Cheltenham	Cirencester	Coleford	Kingswood	Nailsworth	Newnham	Stow-on-the-Wold	Stroud	Tetbury	Tewkesbury	Westbury-on-Severn
		Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards														
Cases removed to Hospital	...	...	...	...	...	...	...	...	612	3	42	361	30	...	9	8	1	...	134	...	21	3
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup)	224*	...	54	128	25	14	2	...	165	...	7	103	31*	7	22	...	...	...	54	...	...	...
Erysipelas	59	2	1	1	6	14	21	14	...	...	...	39	4	...	4	3	...	...	3	...	4	2
Scarlet Fever	592†	2	101	413	51	21	2	...	444	3	36	328	18†	2	50	9	1	3	115	2	22	3
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	25	...	1	1	8	11	2	2	1	...	...	17	1	5	...	...	...	...	1	1	...	...
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	6	...	...	...	2	4	...	...	2	...	...	5	1	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis	2	1	...	...	...	1	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...
Polio-Myelitis	2	...	1	...	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neonatorum	13	13	...	...	...	...	...	...	...	...	...	9	1	1	...	...	...	...	1	...	1	...
Pulmonary Tuberculosis	193†	...	4	23	50	89	21	3	...	1	4	115	5†	4	32	7	1	...	14	2	7	1
Other forms of Tuberculosis	62	3	5	20	17	13	3	1	...	1	3	38	...	...	12	1	...	...	3	1	3	...
TOTALS	1178	21	167	586	160	167	51	20	612	5	52	656	61	19	120	20	2	3	191	6	37	6

* 1 no age given.

† 2 no age given.

‡ 3 no age given.

TABLE XI. (B)—RURAL DISTRICTS.

1914.

L.G.B. TABLE II.—NOTIFIABLE INFECTIOUS DISEASE.

DISEASE.	At all ages	AT AGES—YEARS							Total cases removed to Hospital	Camden	Cheltenham	Chipping Sodbury	Cirencester	Dursley	East Dean	Faringdon (part of)	Gloucester	Lydney	Marston Sicca	Newent (part of)	Northleach	Pebworth	Slow-on-the-Wold (part of)	Stroud	Tetbury (part of)	Tewkesbury (part of)	Thornbury	Warnley	West Dean	Wheatenurst	Winchcombe (part of)
		Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards																							
Cases removed to Hospital	...	...	...	...	...	...	...	...	605	...	27	18	29	24	143	...	17	60	11	1	24	27	2	151	...	18	...	27	...	1	25
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup)	381	3	69	216	53	31	9	...	106	3	9	23	32	102	14	...	15	3	2	8	1	1	...	72	...	...	49	18	21	5	3
Erysipelas	94*	...	1	2	8	25	29	22	1	2	3	23	2*	2	10	...	1	5	...	6*	2	...	4	6	...	2	9	10	...	3	4
Scarlet Fever	1177†	8	216	781	109	51	8	1	491	10	23	156	42†	32	208	...	61	75	11	60	24	34	17	166	1	21	58	59	61	35	23
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	29	...	...	6	13	9	1	...	7	2	...	5	...	4	5	...	4	1	...	...	1	...	...	...	1	...	2	...	3	1	...
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	5	...	...	...	1	4	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...	...
Cerebro-Spinal Meningitis	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Polio-Myelitis	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neonatorum	14	14	...	...	...	...	...	...	...	...	...	1	...	2	2	...	1	1	...	...	1	...	...	...	...	...	1	...	...	...	...
Pulmonary Tuberculosis	315‡	...	10	44	75	130	46	4	...	11	4	18	6	12	44	1	17	6	...	6‡	4	1	6	72	3	3	27	35	27	6	6
Other forms of Tuberculosis	77	3	6	30	18	18	1	1	...	3	1	5	1	8	8	...	3	1	...	...	...	...	2	5	2	...	11	20	6	...	1
TOTALS	2094	28	303	1080	277	268	94	28	605	32	40	231	83	163	291	1	103	92	13	80	33	37	29	321	7	27	158	143	120	50	40

* No age given—Cirencester 1, Newent 6.

† No age given—Cirencester 3.

‡ No age given—Newent 6.

TABLE XII.

Average Fatality (deaths per 100 cases) of Scarlet Fever, Diphtheria and Typhoid Fever.

	Scarlet Fever			Diphtheria			Typhoid Fever		
	Urban	Rural	County	Urban	Rural	County	Urban	Rural	County
1899-1901	2.44	1.71	1.90	10.25	13.70	12.5	16.32	18.75	17.5
1902-1904	1.72	1.85	1.81	10.80	9.60	10.0	19.05	11.69	14.1
1905-1907	.65	1.5	1.26	11.99	7.70	8.46	17.57	10.74	13.3
1908-1910	.40	1.22	1.08	6.10	10.65	9.25	25.72	13.16	19.18
1911-1913	.92	1.14	1.07	5.92	6.83	6.57	11.90	11.60	11.77
1914	.51	1.27	1.02	13.84	12.34	12.90	20.00	34.48	27.76

SMALL-POX.

No case of small-pox was notified in this County in any one of the last three years, the most recent outbreak being that in the Stow-on-the-Wold Rural District in 1911. On the other hand, cases have been introduced into the Port of Bristol from time to time, and, but for the effectual control which is maintained, the County areas would be exposed to considerable danger.

There would appear to be grave reason for anticipating that one result of the great war may be a more or less general outbreak of this disease, and in their warning to the Boards of Guardians, the Local Government Board for Ireland pointed out that the outbreak which followed the Franco-Prussian War of 1870 was not only of practically world-wide diffusion, but was also of marked intensity and malignity.

The special measures necessary in dealing with this disease include—

- (1) Prompt and effective control of known cases, including removal of cases and disinfection of houses, &c.
- (2) Supervision of contacts and detection of mild cases.
- (3) Searches for “missed” cases.
- (4) General vaccination and re-vaccination.

The introduction of small-pox amongst a community completely protected by vaccination does not call for elaborate precautionary measures, but in view of the fact that our population is increasingly unprotected, no single measure can safely be omitted. The following Table gives the proportion of unvaccinated children on admission to our schools during the past six years.

PERCENTAGE OF CHILDREN NOT VACCINATED ON
ADMISSION TO ELEMENTARY SCHOOLS.

1909	...	...	...	...	33
1910	...	...	...	...	28
1911	...	...	...	...	29
1912	...	...	...	...	34
1913	...	...	...	...	39
1914	...	...	...	...	41

The outlook, therefore, is far from satisfactory, and should the anticipations be realised, the position of the County will be very serious indeed.

SCARLET FEVER.

TABLE XIII.

	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905
Cases	1769	1301	770	927	735	677	532	935	584	A 548
Deaths	18	13	7	12	7	6	6	14	9	3
Hospital Cases	935	738	413	343	309	315	232	247	206	221
Case Fatality	1.02	1.0	.91	1.29	1.22	.89	1.13	1.50	1.54	.55
Death-rate per 1000 ... ..	.05	.04	.02	.04	.03	.02	.02	.04	.03	.01
England and Wales: Death-rate per 1000		.06	.05	.05	.06	.09	.08	.09	.10	.11

A Excluding Chipping Sodbury Rural District.

As already mentioned, scarlet fever was more prevalent than in any previous year for which records are available—from 1896: the lowest recorded number was 532 in 1908. The cases steadily increased year by year to 927 in 1911, and then, after a slight remission in 1912, to 1301 in 1913 and 1769 in 1914, the rising wave spreading over seven years. It is to be hoped that the maximum height was reached last year, and that we may now look forward to a steady decline for many years. The only area of the County which was comparatively free was the eastern part round Cirencester, Stow-on-the-Wold, Tetbury and Winchcombe.

Fortunately the type of the disease has generally been mild, and the fatality was about one-half of what it was even only fifteen years ago. The spread of the infection in localities appears to be regarded generally as due to the lack of recognition of the nature of the illness and want of

proper care on the part of parents, as instanced in the following observations by Dr. Garrett and Deputy Surgeon-General Andrews. The former says :—

“The type of the disease (though mild) was nevertheless exceptionally infectious, and enquiry into the causation of the repeated outbreaks over and again revealed a neglected causing case of a very mild description, with a history of a slight rash and indisposition lasting only a few days. These cases were judged by the parents to be of too little consequence for a doctor to be called in, the children being sent back to school whilst still suffering from the disease, only to be discovered upon inspection of all the children in the school or class, after several cases had occurred amongst the other children to create the suspicion of the existence of such a causing case. In more than one instance the neglect was followed by a nemesis overtaking the family of the neglected child, in one case four children and the mother all developing the disease, and in another family no fewer than six members being laid aside by it.”

Dr. Andrews says :—

“There is no doubt that it was spread about to a certain extent by children having the infection being allowed to move about freely in public, and while this has been probably due in some measure to the illness having been so mild that parents have hesitated to incur the expense of medical attendance and have probably never been made aware of the nature of the illness, in other instances parents have wilfully exposed the children in public, knowing they were in an infectious condition, rather than suffer the inconvenience that proper isolation would have entailed, and in the East Dean District the Council decided to prosecute in cases where it was felt the circumstances called for such action.”

As has already been mentioned, the average fatality is low and has fallen nearly 50 % in the past fifteen years : the average for the ten years 1901-10 was 1.57 %, the rural rate (1.66) being slightly above the urban (1.34). In some districts, however, the fatality has been considerably above the average, especially in Kingswood (3.4), East Dean

(3.0), Coleford (2.7), Chipping Sodbury (2.6), Warmley (2.4), Lydney (2.2), and Thornbury (2.1). During 1914 some of the cases in the Stroud Rural District would appear to have been of a particularly severe type, the average fatality in this district being 3.6 %.

DIPHTHERIA.

From the following Table it will be seen that the number of cases notified during 1914 was greater than in any year since 1907.

TABLE XIV.

	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905
Cases	605	393	406	418	551	401	486	648	504	A 632
Deaths	78	30	29	20	37	39	57	70	42	39
Hospital Cases	271	125	110	113	254	106	171	191	167	80
Case Fatality	12.90	7.63	7.14	4.78	6.71	9.7	11.7	10.8	8.33	6.17
Death-rate per 1000 ...	.24	.09	.09	.06	.11	.11	.17	.21	.13	.13
England and Wales: Death-rate per 1000		.12	.12	.13	.12	.14	.16	.16	.18	.16

A Excluding Chipping Sodbury Rural District.

This is mainly due to the large numbers of cases occurring in Cheltenham Borough (103), Stroud Urban (54), and Dursley (102), Stroud (72), and Thornbury (52) Rural Districts.

URBAN DISTRICTS.

Cheltenham Borough.—After referring to the high death rate and the variation in type to which diphtheria is subject, Dr. Garrett says that scarlet fever and diphtheria were at their worst together in the latter half of the year, and at the same time

there was a good deal of other throat affection, some apparently of an influenzal nature, others of the nature of acute tonsillitis, and perhaps a few cases resembling those of the peculiar kind of sore throat that he reported last year as having occurred as a definite invasion in 1913, and which appeared to be associated with a specific micrococcus.

Stroud.—Diphtheria was very prevalent in the second half of the year. Multiple cases occurred in only 5 houses; Dr. Green thinks that a large number of mild and typical cases are never found and act as "carriers" in the schools.

RURAL DISTRICTS.

Dursley.—The infection was undoubtedly spread, in the main, by personal contact of the children at school and in their homes. By constant supervision of the children in schools and swabbing those who presented suspicious signs it was possible to avoid closure of the schools. Most of the cases occurred in Dursley.

Stroud.—In this district also the tendency of scarlet fever and diphtheria to be prevalent together is noted. More than one-third of the 72 cases occurred in Bisley, beginning in April; nearly 400 swabs were taken and a number of "carriers" were found. The throats and noses of the latter were treated until apparently free from infection. The whole of the school drainage was re-arranged.

Thornbury.—Most of the cases occurred at Thornbury and Purton and a peculiar feature was the greater prevalence among adults than amongst children. A Nurse was engaged at Purton.

In other reports evidence is also given that personal infection at school played a large part in the increased prevalence of diphtheria, and that control depends in great measure on the detection of unrecognised cases.

The type of the disease appears, judging from the number of deaths, to have been much more severe than in recent years, particularly in East Dean Rural, Kingswood

Urban, and Cirencester Urban and Rural Districts. Dr. Garrett points out that—

“The case death rate will naturally be much lower where cases are called diphtheria upon bacteriological evidence without due reference to clinical signs.”

The mild cases detected by these means in various districts, without which control is ineffective, would tend to reduce the recorded fatality, but unless these are included information as to the prevalence and actual fatality of the disease would be very incomplete.

The average fatality has fallen from 12.5 % in 1899-01 to 6.6 % in 1911-13, but varies greatly in different districts. The rate for the whole County in the ten years 1901-10 was 9.4: excluding seven small districts in which only one or no deaths were recorded, the fatality varied from 2.4 in Charlton Kings Urban and 2.45 in Thornbury Rural Districts to 15.0 in Northleach and Tewkesbury Rural, 15.5 in Cirencester Urban, 16.7 in Tetbury Rural, 19.8 in Warmley Rural, 26.3 in Westbury-on-Severn Urban Districts, and 28.6 in Tewkesbury Borough. In this respect there appears to be little difference between the urban and rural districts in the County, but the rate in the former (9.5 %) is very slightly higher than that in the latter (9.3 %).

ENTERIC (TYPHOID) FEVER.

The number of notified cases (54) was higher than in either of the two previous years, nearly one-third of them occurring in Cheltenham (17).

TABLE XV.

	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905
Cases	54	35	28	90	26	53	67	63	79	^A 53
Deaths	15	9	1	8	10	7	11	6	9	11
Hospital Cases	8	8	6	41	8	25	24	23	34	12
Case Fatality	27.76	25.7	3.57	8.89	37.0	13.2	16.4	9.5	11.4	20.75
Death-rate per 1000 ... ..	.05	.03	.003	.02	.03	.03	.03	.02	.03	.04
England and Wales: Death-rate per 1000		.01	.04	.07	.05	.06	.075	.07	.09	.09

A Excluding Chipping Sodbury Rural District.

The chief notes in the reports are—

URBAN DISTRICTS.

Cheltenham Borough.—Several cases were contracted outside the Borough, others arose sporadically and 12 of the 17 cases occurred when no part of the water supply was from the river source.

Coleford.—The five cases were confined to two houses; in one the infection was traced to Southampton, and the cases in the other were attributed to the escape of sewer gas into the scullery.

RURAL DISTRICTS.

Dursley.—All four cases occurred in one house in Cam; the primary case appears to have been infected in Bath and the others caused by pollution of the well.

East Dean.—The source of infection in one house where two cases occurred was traced to Bath and in one other instance to Cheltenham. The infection in the remaining two cases does not appear to have been traced with certainty.

Gloucester.—One of the four cases was caused by drinking river water, but the sources of infection in the other three cases in Longford and Longlevens do not appear to have been ascertained definitely.

West Dean.—One case was associated with those in Coleford, but the cause of the remaining two cases in one house was not known for certain.

The average fatality of this disease in the ten years 1901-10 was 14.5 %, 19 % in urban and 11 % in rural districts. There has been considerable variation in this rate in the past 15 years from 11.8 % in 1911-13 to 19.2 % in 1908-10.

PUERPERAL FEVER.

The number of cases (11) notified was higher than in either of the two previous years, but is below the average (12) for the seven years since the passing of the Midwives' Act, 1902: the average for the previous seven years was 18. Six of the cases occurred in the practice of certified midwives, three were doctor's cases; as regards the remaining two cases information is not given.

OPHTHALMIA NEONATORUM.

As mentioned in my Report for last year, this condition was made compulsorily notifiable by order of the Local Government Board as from the 1st April, 1914. The reason given by the Board for making this provision was that "a large proportion of the blindness contracted in childhood is due to the neglect of proper precautions against the disease, and, in the Board's view, it is important that medical officers of health should have early information of all cases."

In this County the number of occasions on which medical assistance has been sought by certified midwives

on account of "inflammation of, or discharge from, the eyes, however slight," was remarkably small up to 1912, being only 18 for the four years, an average of 4.5 per year; in 1913 the number rose to 10 and, coincident with the first year of compulsory notification of ophthalmia neonatorum (purulent discharge), to 20 in 1914. The total number of cases notified as ophthalmia neonatorum by doctors and certified midwives was 27, one-third of them occurring in Cheltenham Borough. Dr. Garrett notes that—

"The chief action of the Medical Officer of Health must be to see that the case is not neglected until the damage to the eyes is done, but that the child be immediately placed under medical treatment, if it be not under such treatment already. The infectiousness of this disease has also to be impressed upon the midwife and others concerned. In each of the cases notified last year this was done."

The services of district nurses, acting under medical direction, are specially suitable for these cases, and from the reports it would appear that in at least two or three instances arrangements have been made for this purpose.

CEREBRO-SPINAL FEVER.

Three cases were notified during 1914, one each in Charlton Kings Urban District, Cheltenham Borough and Gloucester Rural District. No special note is made on the first two cases; the last was apparently one of a group of cases at Elmore, highly suggestive of cerebro-spinal fever, but of an exceedingly mild type.

In the late autumn of 1914 special attention was attracted to this disease owing to the occurrence of several

cases amongst the troops and owing to the high fatality, about 70% of the cases reaching a fatal termination. It seemed that there had been some combination of conditions which for one reason or another had rendered the infectivity of the disease greater than it was formerly, and early in the present year the Local Government Board issued a circular in which, amongst other matters, they referred to the mode of the spread of the disease, probably by the harbouring of the organism in the naso-pharynx, and to the danger of "carriers," persons carrying the organism but either unaffected or suffering only from a slight pharyngeal catarrh. The administrative procedure outlined included—

1. Isolation of the patient.
2. Disinfection.
3. Investigation of possible sources of infection.
4. Precautionary measures as to contacts.
5. General preventive measures.

With a view to the assistance of medical practitioners, the Board made arrangements for the examination of specimens of cerebro-spinal fluid, and the Joint Committee for Tuberculosis agreed to the Tuberculosis Officers performing lumbar puncture for any practitioner desiring this assistance. Arrangements were also made whereby the services of the County Nurses are available for showing the method of spraying throats and noses of contacts. A circular letter to this effect, together with a memorandum

(19th April, 1915) on the disease, was sent to every medical practitioner, but assistance has been desired on only one or two occasions, and at the present time the prevalence of the disease in this country appears to be abating. It is, however, generally regarded as a disease with a tendency to spread in the winter and early spring, and though it is to be hoped the experience will not be repeated this year, it would be well for all districts to be prepared with sufficient isolation accommodation and other necessary arrangements for dealing with cases as they arise and with contacts.

ACUTE POLIO-MYELITIS.

Three cases were notified, one each in Charlton Kings Urban District, Cheltenham Borough and Thornbury Rural District.

TUBERCULOSIS.

The total cases notified in the two years 1913-14 were 1531, of which 1251 were pulmonary and 280 non-pulmonary tuberculosis : of these 296 had died before the end of 1914, leaving 1235 names on the register at the beginning of 1915. Of the 761 cases (626 pulmonary and 135 non-pulmonary), of which particulars were sent to me during 1914, 118 of the pulmonary cases (18·85 %) and 21 non-pulmonary (18·3 %) had died before the end of the year.

Various information with respect to the districts in the county, including the average death rates, *primary* notifications and admissions to the Sanatorium will be found in Table XVI.

TABLE XVI.
TUBERCULOSIS.

DISTRICTS.	PULMONARY TUBERCULOSIS.									OTHER FORMS OF TUBERCULOSIS.			
	Total Deaths, 1901-10.	Average Annual Death Rate.	Existing Cases on an average duration of 3 years.	Notifications			Admissions to Sanatorium.			Total Deaths, 1901-10.	Average Annual Death Rate.	Notifications.	
				1912	1913	1914	1912	1913	1914			1913	1914
URBAN—													
Awre	10	·92	3	...	1	1	...	...	...	3	·28	1	1
Charlton Kings	46	1·11	14	6	4	4	...	4	1	13	·31	1	3
Cheltenham	424	·86	127	103	135	115	7	13	41	228	·46	25	38
Cirencester	73	·96	22	10	9	5	...	1	...	33	·43	4	...
Coleford	26	1·01	8	4	1	4	2	5	4	6	·23	1	...
Kingswood	120	·97	36	44	32	32	1	9	20	40	·32	6	12
Nailsworth	24	·79	7	2	7	7	1	3	1	2	·07	1	1
Newnham	7	·63	2	1	2	1	...	1	1	1	·09	1	...
Stow-on-the-Wold	18	1·34	5	...	3	...	...	...	...	11	·82	...	...
Stroud	129	1·44	39	13	27	14	2	4	7	24	·27	6	3
Tetbury	30	1·60	9	4	4	2	...	1	...	10	·53	...	1
Tewkesbury	68	1·27	20	6	9	7	...	2	2	42	·78	...	3
Westbury-on-Severn	21	1·14	6	5	5	1	...	..	...	7	·38	1	..
Total Urban Districts	996	·99	298	198	239	193	13	43	77	420	·42	47	62
RURAL—													
Campden	46	·83	14	8	7	11	...	4	6	17	·31	6	3
Cheltenham	28	·57	8	13	11	4	1	9	4	14	·28	1	1
Chipping Sodbury	139	·65	42	19	30	18	...	5	11	53	·25	19	5
Cirencester	85	·68	26	14	17	6	...	1	3	32	·26	2	1
Dursley	93	·78	28	20	12	12	...	6	15	25	·21	8	8
East Dean and United Parishes	143	·72	43	33	27	44	2	9	27	67	·34	5	8
Faringdon (part of)	6	·51	2	1	1	1	...	...	1	2	·17	...	...
Gloucester	78	·67	23	20	6	17	4	4	8	27	·23	1	3
Lydney	62	·70	19	11	4	6	1	1	10	19	·22	...	1
Marston Sicca	13	·84	4	1	1	...	...	...	...	4	·26	...	..
Newent (part of)	44	·63	13	8	7	6	...	3	1	13	·19	7	...
Northleach	57	·71	17	5	7	4	1	1	3	13	·16	3	...
Pebworth	13	·42	4	5	6	1	...	...	1	10	·32	...	...
Stow-on-the-Wold (part of)	48	·72	14	10	6	6	2	...	4	17	·26	1	2
Stroud	312	1·12	94	65	82	72	5	36	41	57	·20	13	5
Tetbury (part of)	18	·47	5	7	5	3	...	2	...	8	·21	1	2
Tewkesbury (part of)	33	·66	10	6	5	3	...	...	1	9	·18	2	...
Thornbury	169	·90	51	35	36	27	...	10	11	67	·36	14	11
Warmley	169	1·02	51	52	43	35	1	17	17	46	·28	12	20
West Dean	96	·74	29	26	29	27	2	2	11	32	·25	2	6
Wheatenhurst	57	·935	17	4	9	6	...	1	...	8	·13	1	..
Winchcombe (part of)	81	·89	24	9	5	6	...	...	...	37	·41	...	1
Total Rural Districts	1790	·80	538	372	356	315	19	111	175	577	·26	98	77
Administrative County	2786	·86	836	570	595	508	32	154	252	997	·31	145	139

The scheme for the treatment and prevention of tuberculosis outlined in my previous Reports is gradually becoming more complete, but it has not yet been possible to obtain accommodation for advanced cases, possibly the most essential measure of prevention. The arrangements now made include :—

1. SANATORIUM—

67 beds have been taken at the Cranham Lodge Sanatorium.

2. HOSPITAL BEDS—

(a) Intermediate and advanced cases—The total accommodation desired is 76 beds: pavilions of 12 beds each are in course of erection at the Gloucester and Stroud Isolation Hospitals. Negotiations are proceeding with other hospital authorities, but it is probable that it will not be possible to secure the total number of beds in connection with existing hospitals.

(b) Surgical Cases—

Agreements have been made with the Boards of the Cheltenham General Hospital for ten beds and of the Cossham Memorial Hospital for two beds.

3. DISPENSARIES—

Nine dispensaries were arranged at Cheltenham, Cinderford, Cirencester, Gloucester, Moreton-in-

the-Marsh, Stroud, Thornbury, Warmley and Winchcombe, but in view of the very small use that was made of the last and its unsuitable character, it was given up in July, 1914.

4. SHELTERS—

The advantages of shelters are greatly appreciated and more than 80 are now in use by patients in various parts of the County.

The present staff consists of Dr. W. A. Dickson, Tuberculosis Officer, Dr. C. Alexander, Assistant Tuberculosis Officer, and six County Nurses: the services of the District Nursing Associations at Cheltenham and Gloucester are utilized in their respective areas. Without the co-operation of the Local Sanitary Authorities, as outlined in my last Report, any scheme would be very incomplete, and it is satisfactory to record that such co-operation is forthcoming generally; but there is scope for greater activity, particularly in improving the immediate environment of the houses which—from the evidence so far forthcoming—appears to have greater influence in promoting health or the reverse than more remote conditions, such as elevation, sub-soil, &c.

As a general conclusion, it may be said that the scheme has worked most smoothly and satisfactorily—in great measure due to the tactful and thorough management of Dr. Dickson—and that a good foundation has been laid for future progress. There is, however, much to be done

before evidence will be forthcoming of any great reduction in the incidence of tuberculosis, and it is to be feared that the too sanguine hopes of an early extinction of this disease which have been held out are doomed to disappointment. But as our knowledge grows and as the efficiency of our preventive measures increase, there are good grounds for anticipating that we shall see fruits of our labours in the course of a few years.

NON-NOTIFIABLE DISEASES.

The most complete information as to non-notifiable infectious diseases is obtained from the school returns, which are made weekly. From these it appears that measles was very much less prevalent than in either of the previous three years, while more than twice as many cases of whooping cough occurred in 1914 than in the previous year. Mumps was slightly more and chicken-pox slightly less prevalent.

The only part in which measles was general was in the neighbourhood of Stroud.

There was a curious rise in the number of cases of impetigo, chiefly due to the large numbers at two schools in Northleach Rural District, at Aylburton in Lydney Rural District, at Poulton in the Cirencester Rural District and in the Cirencester Urban District.

BACTERIOLOGICAL EXAMINATIONS.

The numbers of specimens examined during 1914 and previous years are given in the following Table :—

TABLE XVII.

	1908	1909	1910	1911	1912	1913	1914
Diphtheria ...	458	804	3449	1747	1470	2445	2645
Typhoid Fever	53	71	30	60	27	50	44
Tuberculosis ...	124	171	178	226	318	382	338
Total ...	635	1046	3657	2033	1815	2877	3027

Again there was an increase, although the difference was considerably less than between 1913 and 1912. About 80 % of the specimens were taken from cases or suspected cases of diphtheria, and the total number is mainly decided by the prevalence or otherwise of this disease.

From the use that is made of the arrangements for these examinations, it is evident that they are useful and appreciated by medical practitioners.

ISOLATION HOSPITALS.

A summary of the position of the County was given in my last report and will also be found in Tables XVIII. (A) and (B) opposite. The only changes during 1914 were the transfer of the Delancey Hospital at Cheltenham

TABLE XVIII.
ISOLATION HOSPITAL ACCOMMODATION.

1914.

(A) URBAN DISTRICTS.

DISTRICT	GENERAL DISEASES		SMALL-POX		Disinfectors	GENERAL REMARKS.
	Situation	No. of Beds	Situation	No. of Beds		
Awre	Greenway	(12)	None ... ..	...	..	Jointly with Newnham and Westbury-on-Severn Urban and East Dean Rural Districts.
Charlton Kings ...	Delancey Hospital, Cheltenham	...	... ..	...	Washington Lyons	Transferred to Local Authorities, 1914, but no longer available for Small-pox.
Cheltenham ...	Delancey Hospital	90	... ..	...	..	Separate Isolation Hospital for Ladies' College on another site.
Cirencester ...	Cirencester	12	South Cerney	2 Cottages	Antiquated gas disinfectors	Joint Hospital with Cirencester Rural District. New block for 12 beds in course of erection.
Coleford ...	None ... ..	...	None ... ..	...	...	Joint District constituted by County Council, 1901. Steam disinfectors wanted.
Kingswood ...	Mangotsfield	(8)	Fisher Lane	6	...	Iron and wood erected for Small-pox, 1904. Arrangements made with Warmley Rural District Council for eight beds. Steam disinfectors absolutely essential.
Nailsworth ...	Cainscross (joint) ...	(44)	Bisley (joint)	(12)	Goddard, Massey and Warner's, steam	Joint Hospital with Stroud Urban and Rural Districts.
Newnham ...	Greenway	(12)	None ... ..	...	...	Jointly with Awre and Westbury-on-Severn Urban Districts and East Dean Rural District.
Stow-on-the-Wold ...	None ... ..	...	Tents only ... ..	...	...	Tent for Small-pox, jointly with Stow Rural District. Hospital wanted, and combination with other districts suggested.
Stroud ...	Cainscross (joint) ...	(44)	Bisley (joint)	(12)	Goddard, Massey and Warner's, steam	Joint Hospital with Nailsworth Urban and Stroud Rural Districts.
Tetbury ...	None ... ..	...	None ... ..	...	...	Arrangement with Cirencester desired, but no accommodation available.
Tewkesbury ...	Tredington ... ..	...	None ... ..	...	Thresh	Joint Hospital with Tewkesbury Rural District opened. Small-pox Hospital needed.
Westbury-on-Severn	Greenway... ..	(12)	None ... ..	...	...	Jointly with Awre and Newnham Urban Districts and East Dean Rural District.

TABLE XVIII.
ISOLATION HOSPITAL ACCOMMODATION
1914.

(B) RURAL DISTRICTS.

DISTRICT	GENERAL DISEASES.		SMALL-POX		Disinfectors	GENERAL REMARKS
	Situation.	No. of Beds	Situation	No. of Beds		
Campden	Lapstone, Chipping Campden ...	4	None ... ..	...	None ...	House rented at Lapstone, Chipping Campden, 1914. Hospital tents for Small-pox stored at Moreton-in-the-Marsh.
Cheltenham	Delancey Hospital ... ..	...	... ..	...	None ...	Delancey Hospital transferred to Local Authorities, 1914.
Chipping Sodbury	Chipping Sodbury Common ...	8	None ... ..	...	None ...	Increased accommodation, ambulance and telephone needed.
Cirencester	Cirencester	(12)	South Cerney ...	2 Cottages	Gas, antiquated ...	Joint Hospital with Cirencester Urban District. New block being erected.
Dursley	The Moors, Coaley	4	None ... ..	...	None ...	Land for Hospital bought at Breakhearts Hill, North Nibley, 1901, but no water supply and nothing done. The Moors is not suitable for two diseases at the same time.
East Dean and United Parishes	Green Bottom, Littledean ...	12	None ... ..	...	... ..	Jointly with Awre, Newnham and Westbury-on-Severn Urban Districts. Extension under consideration, but in abeyance owing to War.
Faringdon	2 Berthon Huts	10	None ... ..	...	None ...	Not suitable for general use, and not used 1914. Some cases sent to Abingdon. Disinfection is done at Swindon and District Hospital.
Gloucester	Arrangement with Gloucester City Hospital (Highnam) ...	...	Longford ... ..	...	... ..
Lydney	Alvington	12	None ... ..	...	... ..	Accommodation taxed in 1914. Hospital now connected with Alvington mains.
Marston Sicca	Stratford-on-Avon (joint) ...	(20)	Belle Vue (iron) ...	...	Washington Lyons	
Newent	Oxenhall	7	None ... ..	...	... ..	Temporary building totally unfit. Few cases taken by City.
Northleach	Near Northleach	12	Northleach ... ..	...	... ..	Disinfectors wanted.
Pebworth	Evesham (joint)	(24)	Haselor ... ..	...	Recks ...	
Stow-on-the-Wold	None ... ..	...	Tents only ... ..	...	... ..	Tent for Small-pox jointly with Urban District. New tents bought, 1911.
Stroud	Cainscross (joint)	44	Bisley (iron) ...	12	Goddard, Massey ... and Warner	Joint Hospital with Nailsworth and Stroud Urban Districts. A Tuberculosis Pavilion is in course of erection.
Tetbury	None ... ..	...	None ... ..	...	... ..
Tewkesbury	Tredington	22	Tent only ... ..	...	Thresh ...	Joint Hospital with Tewkesbury Borough. No Small-pox Hospital. (Tent only).
Thornbury	None ... ..	...	Millbury Heath ...	...	... ..	Three navvies' huts bought and erected 1909, and put in order 1913. Disinfectors required.
Warmley	Manor House, Mangotsfield ...	22	None ... ..	...	Manlove and Alliot's	Agreement entered into reserving eight beds for Kingswood U.D. Site purchased and plans prepared for Tuberculosis Pavilion.
West Dean	None ... ..	...	None ... ..	...	... ..	Joint District constituted by County Council, 1901
Wheatenurst	None ... ..	...	Eastington W.H. ...	8	... ..	Has an arrangement with the Stroud Joint Hospital Board for three guineas per case per week. No cases could be admitted 1914.
Winchcombe	Langley Hill	4	None ... ..	...	... ..	Used for Small-pox, 1904.

from the Trustees to the Cheltenham Corporation and Charlton Kings Urban and Cheltenham Rural District Councils, under a scheme of the Charity Commissioners; and the adaptation of a house at Lapstone, Chipping Campden, by the Campden Rural District Council. The Cirencester Joint Hospital Board are erecting a new block for 12 beds.

The accommodation for cases of infectious disease, other than small-pox, has therefore increased slightly by about 15 or 16 beds (including the new block at Cirencester), the total beds available in the County being about 250 to 270: these provide for a population of 274,009, but in many hospitals (*e.g.*, Campden, Dursley, Lydney, Newent, and Winchcombe R.D., and the Joint Hospital in the Forest of Dean) the accommodation is suitable for the isolation of cases of only one disease. In other respects some of them, too, are unsuitable. Eight districts with a population of 55,005 have no hospital. To quote once more from Dr. Parsons' report to the Local Government Board: "A town
"or District Council which has not provided hospital
"accommodation adequate and suitable for coping with
"cases (requiring removal) must be regarded as having
"failed in one of its obvious duties for the protection of the
"public health." The advantages of prompt removal are illustrated in the three following extracts from reports for 1914:—

"It is a great benefit to the district to be able to promptly remove infectious cases to the Joint (Infectious) Hospital."—(*Dr. Thomson, Marston Sicca, R.D.*)

“The prompt removal (of cases of scarlet fever) to Hospital probably successfully cut short an epidemic in the town.”—(*Dr. MacMahon, Northleach R.D.*)

“The Isolation Hospital has again proved itself most useful and has been the means of preventing the serious spread of infection.”—(*Dr. Cox, Winchcombe R.D.*)

The urgency of the need for special accommodation depends in very great measure on the possibility or otherwise of efficient isolation in the homes. This aspect of the question is particularly mentioned by Dr. MacMahon, who says:—

“Nursing and proper isolation is frequently impossible, as is the case in most instances in cottages, where the mother has to be nurse and do the housework as well.”

and also by Dr. Buchanan: the latter speaking of the type of new house required in the West Dean Rural District, says:—

“In a district like this, where there is no isolation hospital, it is also necessary there should be sufficient room in every house to enable arrangements to be made for the isolation of first cases of other infectious diseases than tuberculosis.”

Dr. MacMahon's description of the circumstances of the Northleach Rural District may be taken as applying to the County generally, and, from the point of view of economy, it would be less costly to provide suitable hospital accommodation than to build cottages sufficiently large to have a room available for isolation purposes.

The advantages of combination of districts for this purpose have been so often referred to that it is scarcely

necessary to do more than mention them here. Some Medical Officers of Health—for example, Dr. Ashley, speaking of the Tetbury Urban District—appear to consider that the County Council should exercise their powers to secure such combination, and, if the accommodation is not provided otherwise, this action may be necessary. It would, however, be more satisfactory if the districts would themselves make suitable provision without such pressure being brought to bear.

The position with respect to accommodation for small-pox is even less satisfactory, in that suitable provision has been made with respect to only six districts, and 15 have no accommodation: in the remaining 14 districts there is more or less unsatisfactory provision. The Local Government Board in various circulars pointed out the increased importance of making satisfactory arrangements in view of the not unlikely general spread of the infection owing to war conditions, and the County Council gave the matter special consideration, as a result of which, in October, 1914, a communication was addressed to the District Councils excluding the six who possessed accommodation. So far as information has reached me no action has been taken in any area, and, indeed, the position is rather worse than better, in that the Local Government Board have decided that the small-pox pavilion at the Delancey Hospital should no longer be used for this disease and require that other provision should be made.

In view of all the circumstances, the most satisfactory solution would appear to be that one small-pox hospital should be provided for the whole County. That this would be the most economical course there can be little doubt : thus—

1. A smaller number of permanent beds would be required than if several hospitals were provided.
2. There would be one set of establishment charges, instead of several.
3. The occurrence of outbreaks in any parts of the County would necessitate the opening of only one hospital, and there would be only one set of administrative expenses instead of as many as there were outbreaks.

This course, too, would have the advantage of liberating a limited number of beds for other infectious diseases, such as cerebro-spinal fever.

NURSES' EXCHANGE.

In view of the very small support that was given to the scheme arranged by the County Council in 1906, it was reluctantly decided in September, 1914, to drop it for the time being ; as considerable economy in the cost of nursing at isolation hospitals can be effected by some such co-operative arrangement, it is to be hoped that an opportunity for re-starting the scheme will arise in the near future.

DISINFECTION.

No changes appear to have been made in the methods adopted in the various districts, and no reports contain information as to satisfactory provision being made for the disinfection of bedding and other bulky articles in districts for which no steam disinfector is available. In my Report for 1913 it was stated that 25 of the total 35 districts in the County were without an effective appliance, without which the equipment for dealing with infectious disease cannot be considered complete.

PUBLIC ELEMENTARY SCHOOLS.

The Report on Medical Inspection has been issued in a separate volume and contains full particulars of the work done during 1914.

The combination of School Medical Inspection with other Public Health work proceeds as smoothly in three of the districts as in previous years, but owing to the combined work proving too heavy in the West Gloucestershire United Districts, the Medical Officer of Health was relieved of the school inspections at the end of July, and a second whole-time School Medical Inspector was appointed who undertakes the work in that area as part of her duties.

The bulk of our population susceptible to the common infectious diseases pass through the Elementary Schools, and it is therefore a frequent comment in the Annual

Reports that these infections are spread in great measure by personal contact at schools; efforts are directed to prevent avoidable infection in this manner, but, wherever children are aggregated together, there is always the danger of one child who is infectious passing on the infection to others. In some areas this work which may, and often does, entail considerable time and trouble is carried out more effectively than it is in others, but there is increasing evidence in the reports of careful investigations. Thus, during 1914, in Dursley School, closure for diphtheria was avoided by the persistent swabbing of children and the detection of "carriers" by Dr. Brewis; and at Bisley, in the Stroud Rural District, 400 swabs were taken by Dr. Green, though in this case recourse was also had to closure. Similarly, in other areas careful search was made for mild cases of scarlet fever, to which in many cases the spread of the disease in schools was attributed.

The number of closures (91) was less than in 1913 (118), but greater than during the two previous years. Scarlet fever (alone or in conjunction with other diseases) led to this action in respect of 21 schools as against 16 in 1913; but measles being less prevalent only 22 schools were closed in 1914, the number in the previous year being 64. Whooping-cough, on the other hand, occasioned the closure of 28 schools as against 17 in 1913.

Where Medical Officers of Health make comments on the sanitary condition of schools, it is generally reported to be satisfactory.

HOUSING.

In several districts increased attention has been given to the inspection of houses, particularly in the south of the County in the Chipping Sodbury, Thornbury and Warmley Rural Districts, but in others far less work has been done than is desirable. The latter is accounted for in some districts by the temporary arrangements necessitated by the war, and in others by pressure of other work and illness. In the matter of the provision of new houses there was a general drop, principally due to the war, but in six districts the number of houses built was more than double that in 1913, mainly owing to the execution of schemes by District Councils arranged before war broke out. In addition to these effects, another result to which reference is made in one or two reports is that the pressing necessity for increased accommodation has been relieved owing to large numbers of men joining the army.

Inspection was made of housing in several areas by Medical Inspectors of the Local Government Board, including Tetbury Urban, and Cirencester, Stow-on-the-Wold, Tetbury and Wheatenhurst Rural Districts, as a result of which the local authorities were recommended to expedite inspection and to provide additional accommodation. In view, however, of the present circumstances, the Local Government Board have informed local authorities that no loans will be sanctioned for new works except such as are of pressing necessity either for reasons of public health or on account of war requirements. At the same time they

pointed out that the question of unemployment may become acute after the termination of the war, and that it was desirable that schemes should be prepared ready for execution when that time comes.

The general summary of the inspections made in this County is given in the following Table, which shows that there is still considerable room for greater activity if the original survey is to be completed within a reasonable time :—

			Total Houses	No. inspected	Per- centage Inspected	No. with defects for which notices were served	Percentage of houses inspected
Administrative County, 1911			77,003	... 5,006	... 6·5	... 3,117	... 62·3
1912			„	... 5,105	... 6·6	... 2,500	... 49·0
1913			„	... 5,326	... 6·9	... 2,562	... 48·1
1914			„	... 5,542*	... 7·2	... 2,770	... 50·0
Urban ...	...	„	23,349	... 1,338	... 5·7	... 651	... 48·7
Rural ...	...	„	53,654	... 4,204*	... 7·8	... 2,119	... 50·4

The districts in which deficiency of housing is noted in the present series of reports are—

URBAN DISTRICTS.

Cirencester.

Coleford.

Tetbury.

RURAL DISTRICTS.

Campden.—At Chipping Campden and Moreton-in-the-Marsh.

Cirencester.—At Ampney Crucis, Daglingworth, Fairford, Siddington and South Cerney.

* Excluding Newent and Warmley R.D.

Dursley.—In all parishes except Owlpen.

East Dean.—In all parts.

Lydney.—At Lydney.

Northleach.—At Chedworth.

Stow-on-the-Wold.—At Bledington, Bourton-on-the-Water and Naunton.

Tetbury.—At Avening, Boxwell with Leighterton, Cherington, Didmarton, Kingscote, Newington Bagpath and Shipton Moyne.

West Dean.

In some districts consideration has already been given to the recommendations and preliminary arrangements have been made to provide houses, and in a few Public Utility Societies have been formed for the purpose, *e.g.*, in the East Dean, Lydney and West Dean Rural Districts. In other districts no decision appears to have been reached, and though—as already mentioned—no loans will be sanctioned at the present time, schemes should be prepared so that the useful work can be given out when the men return and accommodation may be provided where it is needed.

It may be mentioned that the experience in those districts where houses have been built by the respective Councils is encouraging, particularly in the Campden Rural District, where one of the first municipal schemes in this County was carried out in 1912: four cottages were erected at Mickleton for £700, and are reported to be paying their way at a rental of 3/4 per week.

WATER SUPPLY.**WATER SUPPLIES.**

In the various issues of my Annual Report I have included a table, which has been made a little more complete year by year, of the supplies of water available in the respective districts. The information on which this table was based was obtained from the annual reports of the Medical Officers of Health, who did not, in all cases, give full particulars.

It is now possible to present a general statement of the water supplies in the County, compiled from a Return as to Water Undertakings in England and Wales, issued by the Local Government Board in July, 1914. This Return is a summary of over 3000 schedules sent out by the Board in 1911, revised to January, 1914, and forms a foolscap volume of 599 pages.

The particulars relating to Gloucestershire are summarised in the appended table, and on a map which has been coloured to show which parishes have been supplied, and whether the supply has been provided by the local authority, a water company or by private persons.

One of the most striking facts which is brought out by the Return is the large number of supplies which have been provided by private enterprise and generosity. In my Annual Report for 1904 I gave a list of 23 such supplies; from later information the number was increased to 41. From the Return it appears that the number of parishes (including the Urban District of Newnham) supplied in this way, in whole or in part, is 71, by 55 persons or their representatives and 5 local Committees. In some cases, possibly in the majority, the work has been done in the way of estate improvements, but in others the supply has been provided or assistance given for the benefit of the community generally, for example—at Birdlip, by Mr. W. F. Hicks-Beach and Mrs. Bingham; at Dursley, by Mrs. Eyre; at Alving-

TABLE XIX. (A.)

WATER SUPPLIES.

SUMMARY SHOWING NUMBERS OF PARISHES SUPPLIED BY
VARIOUS AGENCIES.

		Total No. of Parishes	Municipal	Company	Private	Mixed	None
URBAN DISTRICTS							
Awre	...	1	...	...	...	...	1
Charlton Kings	...	1	1	...	...	...	...
Cheltenham	...	1	1	...	...	...	...
Cirencester	...	1	1	...	...	...	...
Coleford	...	1	1	...	...	...	...
Kingswood	...	1	...	1	...	...	...
Nailsworth	...	1	...	1	...	...	...
Newnham	...	1	...	...	1	...	...
Stow-on-the-Wold	...	1	1	...	...	...	...
Stroud	...	2	2	...	...	...	...
Tetbury	...	1	1	...	...	...	...
Tewkesbury	...	1	1	...	...	...	...
Westbury	...	1	...	...	...	...	1
		— 14	— 9	— 2	— 1	—	— 2
RURAL DISTRICTS							
Campden	...	12	3	...	6	1	2
Cheltenham	...	11	5	...	2	4	...
Chipping Sodbury	...	26	...	16	2	1	7
Cirencester	...	36	2	...	18	1	15
Dursley	...	11	4	...	...	...	7
East Dean	...	12	2	2	...	...	8
Faringdon	...	1	1	...	...	...	...
Gloucester	...	22	11	...	...	...	11
Lydney	...	8	4	1	...	...	3
Marston Sicca	...	6	1	...	...	...	5
Newent	...	14	3	...	...	...	11
Northleach	...	29	1	...	...	...	28
Pebworth	...	10	6	...	2	2	...
Stow-on-the-Wold	...	25	5	...	12	...	8
Stroud	...	17	...	12	1	1	3
Tetbury	...	11	...	1	4	1	5
Tewkesbury	...	15	7	...	1	...	7
Thornbury	...	24	...	7	2	...	15
Warmley	...	5	...	5	...	...	...
West Dean	...	4	...	...	...	...	4
Wheatenhurst	...	13	...	2	2	...	9
Winchcombe	...	28	5	...	7	...	16
		— 340	— 60	— 46	— 59	— 11	— 164
Administrative County		354	69	48	60	11	166

TABLE XIX. (B).
WATER SUPPLIES.

DISTRICT	MUNICIPAL SUPPLIES	WATER COMPANIES	PRIVATE SUPPLIES	MIXED	NONE
URBAN—					
Awre ... ..	...	...	...	...	Awre
Charlton Kings	Cheltenham Borough (1) ... ..	...	...	...	...
Cheltenham	Cheltenham Borough (1) ... ..	...	...	...	...
Cirencester	Urban District Council ... ..	...	...	...	...
Coleford	Urban District Council ... ..	...	...	...	...
Kingswood ... ..	...	West Gloucestershire Water Co. (a)	...	...	...
Nailsworth ... ..	...	Stroud Water Co. (b)	...	...	...
Newnham ... ..	...	...	Exors. of S. W. Woods	...	...
Stow-on-the-Wold	Urban District Council ... ..	...	...	...	...
Stroud	Urban District Council ... ..	...	...	...	...
Tetbury	Urban District Council ... ..	...	...	...	...
Tewkesbury	Cheltenham Borough (1) ... ..	...	...	...	...
Westbury-on-Severn ... ..	...	...	...	...	Westbury-on-Severn
RURAL—					
Campden	Adminton, Chipping Campden, Moreton-in-the-Marsh ... ..	...	Batsford, Bourton-on-the-Hill, Clapton, Hideote Bartrim, Lower Lemington, Mickleton	Quinton	Ebrington, Todenham
Cheltenham	Cowley, Staverton (1), Swindon (1), Aekington (1), Up Hatherley (1) ... ..	...	Coberley, Shurdington	Badgeworth (1), Great Witcombe, Leekhampton (1), Prestbury	...
Chipping Sodbury ... ..	...	Acton Turville (a), Chipping Sodbury (a), Doddington (a), Doynton (a), Filton (a), Hampton Cotterell (a), Great Badminton (a), Horton (a), Old Sodbury (a), Stoke Gifford (a), Tormarton (a), West-erleigh (a), Wick and Abson (a), Wiekwar (a), Winterbourne (a), Yate (a)	Alderley, Puckleechurch	Hawkesbury	Cold Ashton, Dyrham and Hinton, Iron Acton, Little Sodbury, Marshfield, Wapley and Codrington, West Littleton
Cirencester	Brimsfield, Stratton ... ..	...	Ampney Crucis, Baunton, Colesborne, Daglingworth, Edgworth, Fairford, Hatherop, Kemble, Maiseyhampton, North Cerney, Poole Keynes, Poulton, Preston, Quenington, Rendcombe, Rodmarton, Sapperton, Syde	Coates	Ampney St. Mary, Ampney St. Peter, Bagendon, Barnsley, Down Ampney, Driffield, Duntisbourne Abbots, Duntisbourne Rouse, Elkstone, Harnhill, Kempford, Siddington, Somerford Keynes, South Cerney, Winstone
Dursley	Coaley, Dursley, Kingswood, Wotton-under-Edge ... ..	...	...	...	Cam, North Nibley, Nympsfield, Owlpen, Slimbridge, Stinchcombe, Uley
East Dean and United Parishes	East Dean, Little Dean	Abinghall (d), Mitcheldean (d)	...	...	Blaisdon, Bulley, Churcham, Flaxley, Huntley, Longhope, Minsterworth, Ruardean
Faringdon	Leechade ... ..	...	...	...	...
Gloucester	Barnwood (2), Brockworth (2), Churchdown (2), Hempsted (2), Highnam (2), Hucclecote (2), Longford (2), Maison (2), Upton St. Leonards (2), Wotton St. Mary (2), Wotton Vill (2)	...	...	...	Ashleworth, Down Hatherley, Elmore, Lassington, Maisemore, Norton, Prinknash Park, Quedgeley, Sandhurst, Twigworth, Whaddon
Lydney	Alvington, Aylburton, Lydney, Woolaston	Tidenham ... ..	...	...	Hewelsfield, Laneaut, St. Briavels
Marston Sica	Long Marston ... ..	...	...	...	Clifford Chambers, Dorsington, Preston-on-Stour, Welford-on-Avon, Weston-on-Avon
Newent	Bromsberrow (3), Dymock (3), Newent (2)	...	...	...	Corse, Hartpury, Highleadon, Kempsey, Oxenhall, Pauntley, Preston, Radford, Taynton, Tibberton, Upleadon
Northleach	Northleach ... ..	...	...	...	Aldsworth, Aston Blank, Bibury, Chedworth, Colin Rogers, Colin St. Aldvyn, Colin St. Dennis, Compton Abdale, Dowdeswell, Eastington, Eastleach Martin, Eastleach Turville, Farmington, Hamphett, Hazleton, Little Barrington, Salperton, Sevenhampton, Sherborne, Shipton, Southrop, Stowell, Turkean, Whittington, Windrush, Winsor, Withington, Yanworth
Pebworth	Ashton-on-Hill, Aston Somerville, Childswickham, Cow Honeybourne, Hinton-on-the-Green, Pebworth, ... ..	...	Aston-sub-Edge, Saintbury	Weston-sub-Edge, Willersey ... ..	...
Stow-on-the-Wold	Broadwell, Church Icomb, Great Rissington, Nannton, Oddington ... ..	...	Adlestrop, Great Barrington, Icomb, Little Rissington, Longborough, Lower Swell, Mangersbury, Notgrove, Seizecote, Upper Slaughter, Upper Swell, Wyke Rissington	...	Bledington, Bourton-on-the-Water, Clapton, Condicote, Donnington, Eyford, Lower Slaughter, Westcote
Stroud ... ..	...	Gainscross (b), Chalford (b), Horsley (b), King's Stanley (b), Leonard Stanley (b), Minchinhampton (b), Painswick (b), Rodborough (b), Stonehouse (b), Thrupp (b), Whiteshill (b), Woodchester (b)	Randwick	Pitchcombe	Bisley, Cranham, Miserden (f)
Tetbury ... ..	...	Didmarton	Cherington, Shipton Moyne, Tetbury Upton, Weston Birt	Avening	Beverston, Boxwell, Leighterton, Kingseote, Newington Bagpath, Ozleworth
Tewkesbury	Ashchurch (1), Boddington (1), Deerhurst (1), Elmstone Hardwicke (1), Kemerton, Leigh (1), Walton Cardiff (1)	...	Oxenton ... ..	...	Forthampton, Hasfield, Stoke Orchard, Tirley, Tredington, Twynning, Woolstone
Thornbury ... ..	...	Almondsbury (a), Alveston (a), Henbury (c), Olveston (a), Redwick (a), Thornbury (a), Tytherington (a)	Berkeley, Hamfallow ... ..	...	Alkington, Aust, Breadstone, Charfield, Cromshall, Elberton, Falfield, Ham and Stone, Hill, Hinton, Littleton, Oldbury, Rangeworthy, Rockhampton, Tortworth
Warmley ... ..	...	Bitton (a), Hanham Abbots (a), Mangotsfield (a), Oldland (a), Siston (a)	...	...	...
West Dean ... ..	...	...	...	...	English Bicknor, Newland, Staunton, West Dean
Whatehurst ... ..	...	Eastington (b), Frocester (b)	Brookthorpe, Standish ... ..	...	Arlingham, Frampton, Fetherne, Hardwicke, Hareseombe, Haresfield, Longney, Moreton Valence, Wheatenhurst
Winchcombe	Beckford, Bishop's Cleeve, Guiting Power, Winchcombe, Woodmancote ... ..	...	Buekland, Charlton Abbots, Dumbleton, Gotherington, Hawling, Stanton, Temple Guiting	...	Alderton, Alstone, Didbrook, Great Washbourne, Hailes, Little Washbourne, Pinnock and Hyde, Prescott, Roel, Snowhill, Southam, Stanley Pontlarge, Stanway, Sndley Manor, Toddington, Wormington

(a) West Gloucestershire Water Company.

(b) Stroud Water Company.

(c) Bristol Water Company.

(d) West Dean Water Company.

(e) Tidenham Water Company.

(f) Supply provided by Lord of the Manor, 1914.

(1) Cheltenham Corporation.

(2) Gloucester Corporation.

(3) Malvern Urban District Council.

ton, by Mr. Bathurst and Colonel Marling; and at Pebworth, by a lady. Such supplies have been provided mainly in the east and north-east of the County.

The following is a summary of the list of the private supplies given in the Return:—

Person.	Parishes Supplied.
Exors. of the late W. Adam, Esq.	Buckland (Winchcombe R.D.)
R. R. Darber, Esq.	Part of Fairford (Cirencester R.D.)
Misses H. C. & C. S. Barnard ...	Part of Leckhampton (Cheltenham R.D.)
Rev. T. E. M. Barrow	Randwick (Stroud R.D.)
Earl Bathurst	Parts of North Cerney and Sapperton (Cirencester R.D.)
Trustees of the late G. S. Bazley Esq.	Parts of Hatherop and Quenington (Cirencester R.D.)
Bedminster, &c., Collieries, Ltd. ...	Part of Pucklechurch (Chipping Sodbury R.D.)
Lord Biddulph	Poole Keynes and parts of Coates, Kemble and Rodmarton (Cirencester R.D.)
J. S. Blakeway, Esq.	Part of Badgeworth (Cheltenham R.D.)
Capt. R. Brassey	Part of Upper Slaughter (Stow-on-the-Wold R.D.)
H. Bubb, Esq.	Coberley (Cheltenham R.D.)
Capt. Butler	Part of Wyck Rissington (Stow-on-the-Wold R.D.)
Messrs. S. J. & M. Calcutt (Trustees)	Part of Avening (Tetbury R.D.)
Lieut.-Col. J. C. Carruthers-Little	Part of Pitchcombe (Stroud R.D.)
Col. T. W. Chester Master*... ..	Part of Naunton (Cirencester R.D.)
Corpus Christi College, Oxford ...	Parts of Daglingworth (Cirencester R.D.) and Temple Guiting (Winchcombe R.D.)
T. Crewdson, Esq.	Syde (Cirencester R.D.)
F. W. B. Cripps, Esq.	Part of Ampney Crucis (Cirencester R.D.)
C. Cunard, Esq.	Part of Notgrove (Stow-on-the-Wold R.D.)
Lady Darwin & J. M. Collett, Esq.	Part of Brookthorpe (Wheatenhurst R.D.)
J. T. Dugdale, Esq.... ..	Sezincote (Stow-on-the-Wold R.D.)

*Preston (Cirencester R.D.) also now supplied by Executors of the late Col. T. W. Chester Master.

Person.	Parishes Supplied.
H. D'Este East, Esq.	Bourton-on-the-Hill (Campden R.D.)
The late Earl of Ellenborough (Court of Chancery)	Part of Oxenton (Tewkesbury R.D.)
H. T. Elwes, Esq.	Colesborne (Cirencester R.D.)
Lord Esteourt... ..	Shipton Moyne (Tetbury R.D.)
H. Fenwick, Esq.	Upper Swell and part of Lower Swell (Stow-on-the-Wold R.D.)
Lord Fitzhardinge	Part of Berkeley and Hamfallow (Thornbury R.D.)
The Misses C. L. and G. E. George	Cherington (Tetbury R.D.)
S. G. Hamilton, Esq.	Clopton and part of Mickleton (Campden R.D.)
Earl of Harrowby	Parts of Aston-sub-Edge and Weston-sub-Edge (Pebworth R.D.)
G. H. S. Hayward, Esq.	Iccomb (Stow-on-the-Wold R.D.)
J. H. Hewitt, Esq.	Part of Mangersbury (Stow-on-the Wold R.D.)
The Hon. M. H. Hicks-Beach ...	Part of Quenington (Cirencester R.D.)
W. F. Hicks-Beach, Esq.	Part of Great Witcombe (Cheltenham R.D.)
Lieut.-Col. Sir G. Holford...	Weston Birt with Lasborough and parts of Shipton Moyne and Tet- bury Upton
J. Horlick, Esq.	Part of Cowley (Cheltenham R.D.)
A. J. James, Esq.	Part of Edgeworth (Cirencester R.D.)
J. Joieey, Esq.	Parts of Maiseyhampton and Poul- ton (Cirencester R.D.)
Lord Leigh	Adlestrop and Longborough (Stow- on-the-Wold R.D.)
G. W. L. H. Lowesley Williams, Esq.	Parts of Avening (Tetbury R.D.)
Magdalen College, Oxford	Parts of Quinton (Campden R.D.)
Mrs. Eyres-Monsell	Dumbleton (Winchcombe R.D.)
A. M. Streetfield Moore, Esq. ...	Little Rissington (Stow-on-the- Wold R.D.)
Lord Redesdale	Batsford and part of Lower Lem- ington (Campden R.D.)
Lieut.-Col. Fairfax Rhodes	Part of Charlton Abbots (Winch- combe R.D.)
M. Richards, Esq.	Hawling (Winchcombe R.D.)

Person.	Parishes Supplied.
Lord Sherborne	Part of Standish (Wheatenhurst R.D.)
Archdeacon Sinclair... ..	Shurdington
F. S. Stott, Esq.	Stanton (Winchcombe R.D.)
J. H. Taylor, Esq.	Parts of Colesborne, North Cerney and Rendcomb (Cirencester R.D.)
J. G. Villar, Esq.	Gotherington (Winchcombe R.D.)
J. R. West, Esq.	Part of Saintbury (Pebworth R.D.)
M. E. R. Wingfield, Esq.	Great Barrington (Stow-on-the Wold R.D.)
Mrs. G. C. Winthrop	Part of Hidcote Bartrim (Campden R.D.)
Exors. of the late S. W. Woods, Esq.	Part of Newnham U.D.

Local Committees.	Parishes Supplied.
Alderley Private Subscription Supply	Alderley (Chipping Sodbury R.D.)
Alvington P.C.	Part of Alvington
Avening P.C....	Part of Avening
Aylburton W.S. Committee	Part of Aylburton
Hillesley W.S.	Part of Hawkesbury

The Summary for the whole County is as follows:—

				PARISHES.			
				Urban	Rural	Total	
Municipal Supplies	9	60	69				
Water Companies	2	46	48				
Private Supplies	1	59	60				
Partly Private and partly Municipal	—	11	11				
No piped Service	2	164	166				
	14	340	354				

All the urban districts with the exception of Awre and Westbury-on-Severn have a public supply, provided in 9 cases by the Local Authority, 2 by Water Companies, and in 1 (Newnham) by a private individual.

As regards rural districts, it will be seen from the above table that in nearly one-half of the parishes there is no general supply, though the tables include four further parishes for which schemes have been carried out since the Return was made—Preston (Cirencester R.D.) by the Exccutors of the late Colonel T. W. Chester-Master,

Churchdown (Gloucester R.D.) from Gloucester Corporation mains, Long Marston (Marston Sicca R.D.) from Evesham Villages Water Scheme, and Guiting Power (Wincheombe R.D.) local supply, making a total of 176 provided with a piped service. Information is given in the Return as to the total number of houses in each parish, and the number supplied from the piped service, and in the great majority of the cases the latter is very much smaller than the former. For the four undertakings following, the percentage of houses supplied ranges from 32.5 to 87.6.

The largest undertakings in the County are—

1. Cheltenham Water Works.
2. Gloucester Water Works.
3. Stroud Water Company.
4. West Gloucestershire Water Company.

1.—CHELTENHAM WATER WORKS.

There are five sources—

1. River Chelt at Dowdeswell.
2. Springs from the Oolite, Cotswold Hills.
3. Springs from the Oolite, Leekhampton.
4. River Severn above Tewkesbury.
5. Well in bed of sand overlying Lias Clay, Sandford Mead.

They supply Cheltenham M.B., Charlton Kings U.D., Tewkesbury Borough, seven parishes and parts of parishes in the Cheltenham R.D., and six parishes and parts of parishes in the Tewkesbury R.D. Their limits of supply include the above three urban districts, eight of the eleven parishes in the Cheltenham R.D., two parishes in the Gloucester R.D., and eight of the fifteen Gloucestershire parishes in the Tewkesbury R.D.

2.—GLOUCESTER WATER WORKS.

There are 3 existing sources and an additional well in the New Red Sandstone has been sunk at Ketford. The 3 sources are—

1. Gathering ground of 260 acres at Robinswood Hill.
2. Gathering ground of 1,500 acres at Witcombe.
3. Well in New Red Sandstone at Oxenhall, Newent.

They supply the City and 11 parishes and parts of parishes in the Gloucester R.D. and 1 parish in Newent R.D.

Their limits of supply include the City, 2 parishes in the Cheltenham R.D., and 14 parishes and parts of parishes in the Gloucester R.D.

3.—STROUD WATER COMPANY.

The source is wells in the Upper Lias formation at Chalford.

They supply Nailsworth U.D., 13 parishes and parts of parishes in the Stroud R.D., and 2 parishes in the Wheatenhurst R.D., and also supplement the supply of Stroud U.D.

Their limits of supply include Nailsworth U.D., 15 of the 17 parishes in the Stroud R.D., and 1 parish in the Wheatenhurst R.D.

4.—WEST GLOUCESTERSHIRE WATER COMPANY.

The sources are—

1. Wells in Millstone Grit, Coalpit Heath, Frampton Cotterell.
2. Wells in Pennant Formation, Cowhorn, Bitton.
3. Well in Pennant Formation, California, Oldland.

During 1914 the Company obtained powers for a further source from a well in the Oolite at Shipton Moyne.

They supply Kingswood U.D., 17 parishes and parts of parishes in the Chipping Sodbury R.D., 1 parish in Tetbury R.D., 6 parishes in Thornbury R.D., and all 5 parishes in Warmley R.D.

Their limits of supply include Kingswood U.D., 23 of the 26 parishes in Chipping Sodbury R.D., parts of 2 parishes in Dursley R.D., 1 parish in Tetbury R.D., 19 of the 24 parishes in Thornbury R.D., and all 5 parishes in Warmley R.D. Under their Act of 1914 they extended their limits of supply to include 4 further parishes in Tetbury R.D., 2 further parishes in Chipping Sodbury R.D., and one more parish in Thornbury R.D.

The above four Water Authorities possess specific powers under their respective Acts; there are also in the County two small companies without such specific powers, namely the Mitcheldean Waterworks Company, Ltd., which supply parts of Abinghall and Mitchel-

dean (East Dean R.D.), and Tidenham Waterworks Company, Ltd., which supply a part of Tidenham (Lydney R.D.)

The 71 rural parishes supplied in whole or in part by the respective local authorities include 13 covered by the mains of the Cheltenham Corporation, 12 by the Gloucester Corporation, 2 by the Malvern U.D.C., and 1 from the mains of the Cirencester U.D.C. The remaining 43 parishes are supplied from local schemes.

It has already been mentioned that in the great majority of cases only a proportion—and in some instances only a very small proportion—of the houses is supplied from the piped service; from the notes which are given in the Return it appears that the public supplies are generally good and sufficient. The needs of the 188 urban districts and parishes would therefore be satisfactorily met if the water were available for every house without an alternative sufficient supply. On the other hand there must be many of the remaining 166 parishes the circumstances of which would be greatly improved if a piped service were provided. With respect to several, particularly in the Severn Valley and in West Dean, better supplies of water are required, and the District Councils concerned have been urged by the County Council to provide them.

In conclusion, it is satisfactory to see that many local authorities and landowners have appreciated their responsibilities in this matter, and it is to be hoped that one result of the publication of the report will be to encourage other authorities and landowners to imitate their example.

The above general statement is supplemented in the following notes derived from the reports for 1914:—

URBAN DISTRICTS.

Cheltenham.—There has not yet been time to estimate the results of the work done with a view to the prevention of troublesome water plants in the reservoirs.

Colcford.—For years it has been reported that the supply is quite inadequate. A sufficient quantity was found in the Mill Pound Pit but the water is not fit for use. The matter is serious.

Newnham.—It is believed that the repairs effected will ensure an adequate supply.

Stroud.—The provision of increased storage and arrangements for softening have been under consideration.

Tetbury.—The efforts to make good the serious deficiency by sinking a well in Chavenage Lane proved unsuccessful, and it has been decided to apply for a loan of £3,313 for a borehole 400 feet deep on the site of the present works.

RURAL DISTRICTS.

Campden.—Bourton-on-the-Hill—No scheme can be suggested except at prohibitive expense.

Moreton-in-the-Marsh.—The owner of the mill shared the expense of making improvements at the pumping station.

Chipping Sodbury.—The West Gloucestershire Water Company have obtained a new source and extended their limits of supply. The mains were carried to Westerleigh.

Cirencester.—Siddington—The wells are liable to contamination, and the District Council have recommended the Parish Council to consider the provision of a supply.

Dursley.—Cam—There is a great need of a proper water supply.

East Dean.—Ruardean Hill—The new engine has been fixed and the pumping plant is practically ready; plans for the extension of the mains have been completed and will be forwarded to the Local Government Board.

Gloucester.—Hempsted—Upper and Lower Rea—The wells are liable to pollution and when there is scarcity the Severn may be used. Arrangements for an improved supply were under consideration.

Tuffley and Longlevens.—Steps have been taken to prevent the pollution of wells, with satisfactory results.

Northleach.—Aldsworth—It is imperative that a satisfactory public supply should be provided.

Bibury.—The supply should be extended to many houses which are dependent on the brook water.

Northleach.—The supply is short and should be supplemented from water running to waste near the source.

Withington.—Many houses are dependent on the brook, which is liable to pollution.

Stow-on-the-Wold.—Bledington—Nothing has been done.

Clapton.—The supply is deficient and it is proposed to sink another well.

Stroud.—Miserden—A supply from a considerable distance has been provided by the Lord of the Manor.

Tetbury.—Tetbury Upton—There is considerable scarcity in dry weather and many houses are without good water at any time; the question should receive serious consideration as soon as a good supply has been found for the town.

The West Gloucestershire Water Company have sunk a well at Shipton Moyne and have extended their limits of supply to include this parish, Weston Birt with Lasborough and Boxwell with Leighterton.

Tewkesbury.—The mains are being extended to hamlets in Ashchurch Parish.

Warmley.—The District Council secured the inclusion in the West Gloucestershire Water Company's new Act of a provision whereby softened water from the present sources is to be supplied if the Council are of opinion that the new supply is inferior to that obtained from the present source.

West Dean.—On the promise of financial assistance from the Treasury, the Council adopted a comprehensive scheme for a supply from the Old Red Sandstone in the Howbeach Valley, and a well is now being sunk.

Wheatenhurst.—Many parts are badly off owing to the possibility of pollution or the distance water has to be carried. The District Council referred the question of extending the Standish Park mains to Moreton Valence to the Parish Council, but no further action has been taken and none is contemplated.

Winchcombe.—It was hoped that the scheme as amended would be satisfactory to the Local Government Board.

The efforts made to improve the supplies in certain areas, for example, Tetbury Urban and East and West

Dean and Winchcombe Rural Districts, are encouraging, and it is to be hoped that the successful completion of these works may be reported next year. On the other hand there are parts in which the responsibility does not seem to be fully appreciated, and the tendency to transfer it to Parish Councils, which appears from some of the reports to exist, cannot be regarded as satisfactory. The present time may not be convenient for the execution of schemes, but this can scarcely be taken to include the consideration and preparation of work which should be undertaken in the interests of public health, *e.g.*, in such areas as that of the Wheatenhurst Rural District.

SEWERAGE AND SEWAGE DISPOSAL.

Early in the present year the Royal Commission on Sewage Disposal, which was appointed 17 years ago, issued their Ninth and their Final Reports. The last twelve pages of the former deals with "The disposal of liquid and solid refuse in rural areas," and contains information which is of first importance in County administration. Their conclusions are:—"In rural areas the main fact governing "the question of the removal of excremental matter and "domestic waste waters is the abundance or the scarcity of "the water supply."

"(1) With an abundant water supply, piped to the houses, water carriage is, in our opinion, the most satisfactory system. In most cases abundant water supply will involve a system of sewerage. Where there are isolated dwellings which it would be very costly to connect with the drainage system of the district, the cesspool is a possible alternative, where there is no danger of polluting water supplies.

“Under the Public Health Act, local authorities have a discretion in regard to compelling connection with their sewers. We think it right that with their local knowledge they should have this discretion. The storage and disposal of excreta is a matter concerning a man's neighbour as well as himself.

“(2) Where a water carriage system is impossible because of the inadequate water supply, we believe that under proper supervision, a system of dry closets may be open to little objection on sanitary grounds, provided the closet is so constructed that its contents can be conveniently and frequently removed, as by the use of pails.

“In small communities the removal may generally be left to the householder. In larger villages it may with advantage be undertaken by the local authority.

“The domestic waste water is best distributed over the gardens, or it may be conveyed to a cesspool, as far as possible from the dwelling, if no water supplies are prejudiced by the leakage from them.

“In villages where no sewers are available, it is desirable that cottages should be provided with ample garden space for the disposal of domestic refuse.

“The use of dry earth in dry closets is of great importance, and local authorities should be given full power to secure its use.

“Local authorities should also circulate to householders elementary information as to the best method of dealing with refuse over their gardens.”

Sir William Ramsay drafted a separate memorandum, giving a very clear account of the problem in rural areas and its solution on the lines recommended and practised by himself and the late Dr. Vivian Poore in different localities. He first describes the various forms of dry closets:—

1. Privy, emptied only where accumulation is so great that the place can no longer be used. Such a method stands self-condemned.

2. Pail-closet, emptied at shorter intervals and easier to handle.
3. Earth closet, the same as the last except that earth is sprinkled on the fæces.
4. Privy-midden, a privy also used for disposal of house refuse.
5. Privy-ashpit, the same as the last except that only dry house refuse is deposited.

Mention is then made of cesspools and their disadvantages.

He concludes that:—

1. In areas where houses are massed together, a drainage system is indispensable.
2. In scattered areas :
 - (a) Excreta should be received in buckets and buried daily in the ground, not more than nine inches deep: *shallow* burial of excremental matter is necessary.
 - (b) Slop waters, even bath water and urine, should be distributed, after straining through a wisp of straw (changed weekly) and an old bucket filled with coke, on the surface of the ground, the sides of the gutter being planted with plants liking moisture, such as black currant or raspberries.

His final recommendations were:—

“(1) That legislation be so framed that no obstacle shall be placed in the way of any person or community preventing them from disposing of sewage and slop water in the soil; and that where there is a mixed community, part of which lives in terraces and streets, and part in isolated houses, rates for a water carriage scheme should be levied only on those houses which are served by it.

“(2) That Inspectors be encouraged to gain knowledge as to the elementary principles involved in the domestic disposal of sewage by the issue to them and to the public of literature dealing with accredited means of disposal.

“(3) That a simple set of regulations should be drawn up for use by the public, the contravention of which should be punishable by a small fine; and

“(4) That booklets of instructions should be issued at a cheap rate, so that no householder can remain in ignorance of means which will easily dispose of his refuse, while at the same time his garden will be rendered much more productive.”

The important point in the conclusions of the Commissioners, which is omitted in Sir William Ramsay's statement, is the permissibility of allowing waste waters to be “conveyed to a cesspool . . . if no water supplies “are prejudiced by the leakage from them.” In many cases there may appear to be no probability of water supplies being polluted, but by the disposal of polluted waters underground advantage of the purifying influence of the surface soil is lost and water supplies even at a distance may be endangered thereby. The experience of such men as Sir William Ramsay and Dr. Vivian Poore has shown that with a little management soiled waters can be satisfactorily treated on the surface of the ground, and

there would therefore appear to be no justification for taking risks.

The whole question would appear to resolve itself into education of sanitary administrators and of the public generally on the lines recommended by Sir William Ramsay. There is ample evidence, not only in the reports for 1914 but in those that have been reviewed year after year, that not only would many nuisances which are perennial sources of trouble have been avoided, but also that places would have been saved the cost of putting down expensive schemes of sewerage and sewage disposal, as has been mentioned in my previous Reports.

The chief matters in the annual reports to which special reference may be made are :—

URBAN DISTRICTS.

Cheltenham.—The disposal works have been completed with the exception of the humus tanks.

Coleford.—The necessity of providing a comprehensive scheme has been urged for many years.

Stow-on-the-Wold.—The only sewer is that laid to drain the houses in the immediate neighbourhood of the water works.

Stroud.—The conversion of the chemical to bacteriological disposal works was nearly completed. No sewer has yet been provided for Bowbridge or Paganhill.

Tetbury.—The sewerage system has been made complete by the laying of a sewer to drain the houses in Charlton Road.

RURAL DISTRICTS.

Campden.—Chipping Campden—The consideration was postponed owing to the war.

Chipping Sodbury.—A few small improvements were made in 4 parishes on account of purely local conditions.

Dursley.—Cam—Only 58 houses out of a total of 437 have been connected.

Kingswood and Nympsfield.—Sewerage schemes are required.

Wotton-under-Edge.—A tender of £8,087 has been accepted and work has been commenced.

Cirencester.—Siddington—The District Council recommended the Parish Council to provide an efficient system of drainage.

Various minor improvements were made at Fairford, Kempsford, Poulton and Preston.

East Dean.—Drybrook—The conditions have been the subject of complaints, for many years, and the question of drainage was again under discussion. Nothing was settled, but it is possible the Council may feel prepared to devote attention to this scheme when several now receiving consideration are nearer settlement.

Gloucester.—Churchdown—The scheme has been completed.

Newent.—Newent—The system is very ancient.

Stow-on-the-Wold.—Broadwell—The sewage is now treated by irrigation.

Tetbury.—Didmarton—Considerable nuisance arises from use of a highway drain and ditch as sewers. The matter is under consideration.

Leighterton.—The conditions have been improved by laying a drain from the farmyard to a field.

Thornbury.—The only constructive work was the extension of a sewer at Sharpness.

Warmley.—Mangotsfield—The present filters have been long overtaxed and the Committee have decided to erect a new filter.

Siston.—The chief work has been to secure the connection of premises with the new sewers.

Wheatenhurst.—Alkerton, Eastington—It has been decided to arrange satisfactory filtration and irrigation of the tank effluent.

Winchcombe.—Winchcombe—Although the sewers were completed in 1911 there are still 72 houses (with privy vaults and with drainage discharging to stone culverts) which ought to be connected.

RIVERS POLLUTION

Though considerable attention has been given in many parts to the purification of sewage before it is discharged into streams, the following notes show that there are still places which require the consideration of the Councils concerned:—

URBAN DISTRICTS.

Cirencester.—Owing to complaints by the Thames Conservancy Board, house drainage was diverted from certain surface water drains, and the main drain in Cricklade Road was extended and discharged into a ditch.

Coleford.—The brook still performs the duties of a sewer.

Nailsworth.—There is not much change in the condition of the streams but a considerable amount of sewage has been removed.

Stroud.—All the streams receive trade and other pollution and it is fortunate that the main stream enters a tidal river.

RURAL DISTRICTS.

Campden.—Chipping Campden—The sewers discharge to the stream.

Dursley.—The Cam is polluted by sewage at Cam (very few connections with sewers), Dursley, and Dyer's Brook at Wotton-under-Edge (scheme being carried out) and Kingswood.

East Dean.—Mitcheldean—Application has been made for an injunction to prevent the drainage of Mitcheldean entering the brook, and at the close of the year the action was pending.

Northleach.—Southrop—The pollution of the Leach has been under consideration, but is as yet unsettled.

Stroud.—The Frome receives a certain amount of sewage pollution, and the washings from rag, flock and cloth dyeing establishments which naturally discolour the water very much, and the main stream in its lower reaches is very black and turbid. Owing to the very gradual fall there is very little chance of self-purification by aeration.

Warmley.—The waters of the Boyd Brook are utilized in the colour works at Wick and the paper mill at Bitton.

Wheatenhurst.—Many ditches are often very offensive from the discharge of drainage.

Some of the above form the subject of perennial remarks, *e.g.*, Coleford Urban District, and Campden, Dursley and Wheatenhurst Rural Districts, and it cannot be regarded as satisfactory that so little should have been done to remove cause for complaint. It is true that in their Eighth Report the Royal Commission on Sewage Disposal recommended less severe restrictions, but even so, the Commission only limit relaxation to prevent further expenditure than would suffice to prevent the recurrence of actual nuisance; this would not free local authorities from liability where the ordinary amenities are interfered with. Measures of prevention are briefly mentioned in the preceding section of this Report, and if these were followed as closely as possible, many sources of trouble would be removed, once for all.

DISPOSAL OF HOUSE REFUSE.

Increased attention has been given to the importance of disposing of house refuse in a satisfactory manner, since the objection to accumulations—in addition to the obvious

nuisance from effluvia—as breeding places for flies and rats, and the possibility of infection being carried by them, have become more generally recognised. During 1914—as mentioned in my Report for last year—legal recognition was given to the liabilities of persons for the proper disposal of refuse so as to avoid nuisance from flies, in the case of *Bland v. Yates*, in the Chancery Division.

The Local Government Board have issued various circulars on this matter, and in April, 1915, sent out a return as to scavenging in Urban Districts, in which they outline the dangers and the measures that should be taken to prevent them. By the direction of the County Council circulars were issued and a leaflet was distributed generally, both in 1913 and 1914, for the guidance of householders. Both the returns above mentioned and the annual reports contain evidence, however, that their respective responsibilities are not yet fully realised by all local authorities and householders. Amongst the observations in this series of reports are the following:—

URBAN DISTRICTS—

Charlton Kings.—No refuse destructor has yet been provided. (In the Return the tip is described as being only 50 yards distant from houses.)

Cheltenham.—If householders would insist upon the covers being put back after using the receptacle, it would prevent rain getting into the dust bin and would do much to keep down the nuisance from flies.

Cirencester.—The present refuse tip should be abandoned since it is open to serious objection from its proximity to the Isolation Hospital.

Stroud.—The destructor has been in use many months and is efficiently doing its work. The general provision of covered sanitary ashbins is advisable.

Westbury-on-Severn.—A special report was made by the Medical Officer of Health on the importance of measures being taken to prevent the breeding of flies and the infection of food by them.

RURAL DISTRICTS—

Campden.—Heaps of refuse forming breeding places for flies are often found close to houses. Systematic scavenging is again recommended for Chipping Campden and Moreton-in-the-Marsh.

Cheltenham.—The necessity for proper bye-laws and Council control becomes yearly more important with the increase of small villa residences.

Chipping Sodbury.—Scavenging is desirable in all parts.

Cirencester.—Public scavenging should be undertaken in the larger villages, and was suggested by the District Council to the Parish Councils of Fairford and Siddington, but no action has resulted. The covering of freshly deposited refuse with earth at Stratton appears to have abated the nuisance.

Dursley.—The new tip for Dursley is a great improvement; a more satisfactory place than the lane at Cam should be found for depositing refuse.

East Dean.—Unsatisfactory conditions at Cinderford were largely due to the carelessness and negligence of the householders themselves. The undesirable state of many of the yards at Mitcheldean still requires attention.

Faringdon.—Scavenging is needed.

Northleach.—Again, scavenging is an essential necessity at Northleach.

Stow-on-the-Wold.—The scavenging of Bourton-on-the-Water is much appreciated by householders.

Tetbury.—Scavenging is badly needed at Avening, Didmarton and Tetbury Upton (Northfield) where many of the gardens are small.

Winchcombe.—The Medical Officer of Health is pleased to find that a system of scavenging has been commenced at Winchcombe; but certain improvements are needed.

The above extracts bring out the responsibilities of both householders and local authorities, and the appreciation with which the adoption of systems of scavenging have been received. They also re-affirm the desirability of more satisfactory arrangements in many places and the value of efficient disposal of refuse, and it is to be desired that future reports will show that effect has been given to the recommendations of the Medical Officer of Health.

SALE OF FOOD AND DRUGS ACTS.

The number of samples examined during 1914 was greatly in excess of that in previous years, mainly due to the facts that 54 samples of cream taken under the Public Health (Milk and Cream) Regulations, 1912, were included, and that 29 samples of cocoa were specially examined in the first quarter of the year. Excluding these the number (461) is almost exactly the same as in previous years, about 1·4 per 1000 of the population. This proportion—as pointed out on previous occasions—is considerably lower than that for the whole of England and Wales and for the contiguous counties of Somersetshire, Warwickshire and Worcestershire.

Of these 461 samples, 21 (13 of milk and 8 of tea) were found to be adulterated, *i.e.*, 4·6 %; this figure is below those in the previous two years but above that in the preceding four years. The total number of specimens taken

during these eight years has been 3,238; of the total 142 specimens found to be adulterated, 89 were samples of milk and 41 were alcoholic drinks. The percentages of milk and alcoholic drinks found adulterated in 1914 were 14·4 and 9·1 respectively. It would, therefore, appear to be desirable to concentrate attention more particularly on milk.

Of the 29 samples of cocoa taken in the first quarter of the year 19 were found to be mixtures containing only 12·8 % of cocoa, 30 % of starch and 47·5 % of sugar: 12 were labelled as mixtures and the remaining 7 were not so labelled.

The total number of samples of cream examined for preservatives was 56, four being declared to contain preservative substance. Of the remaining 52, 18 were found to contain undeclared preservative in the form of boric acid, the proportion ranging from ·1 % to ·4 %. Proceedings were taken in respect of six official samples and a fine of 5/- inflicted in each case.

The County Analyst reported that no foreign thickening substance was found in any of the samples, but noted the following facts with reference to one brand of cream of which two or three tins from various retailers were submitted to him. “The cream contains only 30 % of fat and, “when the tin is first opened, is thin: in the course of 24 “to 36 hours it sours and thickens considerably, owing “apparently to the deposit of casein either from added “milk or from milk which has been incompletely separated “from the fat.”

TABLE XX.
SALE OF FOOD AND DRUGS ACTS.

				Gloucestershire Administrative County. Population 1911 ; 329,014													
				1908		1909		1910		1911		1912		1913		1914	
				Exam.	Adul.	Exam.	Adul.	Exam.	Adul.	Exam.	Adul.	Exam.	Adul.	Exam.	Adul.	Exam.	Adul.
Milk	...	..	...	138	6 <i>4·3</i>	138	6 <i>4·3</i>	153	17 <i>11·1</i>	117	12 <i>10·2</i>	88	15 <i>17·0</i>	111	20 <i>18·0</i>	90	13—14·4
Cream	..	...	...	—	—	—	—	—	—	—	—	—	—	—	—	54	17—31·4
Butter	...	...	...	102	2	107	—	72	—	103	1	111	2	109	1	98	—
Margarine...	...	...	...	1	—	1	—	9	—	2	—	—	—	4	—	6	—
Tea, Coffee, Cocoa	...		...	35	—	38	1	49	—	44	—	24	—	25	—	51*	8—15·7
Sugar	...	...	...	36	—	32	—	37	—	36	—	46	—	40	—	16	—
Other Foods: Lard, Bread, Flour, Rice, Cheese	...		...	37	—	32	—	29	—	38	—	50	—	42	—	79	—
Alcoholic Drinks...	...		...	59	1 <i>1·7</i>	70	4 <i>5·7</i>	79	3 <i>3·8</i>	81	7 <i>8·6</i>	96	14 <i>14·6</i>	81	5 <i>6·2</i>	77	7—9·1
Others	...	...	...	47	—	43	1	38	—	44	—	49	3	54	—	73	—
Total ...	...	...	...	455	9	461	12	466	20	465	20	464	34	466	26	544	45—8·3
Percentage Adulteration	...		...	<i>2·0</i>		<i>2·6</i>		<i>4·3</i>		<i>4·3</i>		<i>7·3</i>		<i>5·6</i>		Exclu 490	ding Cream 28—5·7

Figures in italics=percentages.

* Including 29 special samples of cocoa.

ADOPTIVE ACTS AND BYE-LAWS

So far as can be gathered the only changes made during 1914 were the adoption of new building bye-laws in Newnham Urban District and Tewkesbury Borough. New series of these bye-laws for Awre and Westbury-on-Severn Urban Districts were prepared for submission to the Local Government Board for approval.

The adoption of the Notification of Births Act, 1907, was under consideration in various districts; but it seems to be generally thought that the Act could more usefully be adopted for the whole County, and in some areas action was postponed pending the decision of the County Council on the matter. At a Conference, convened by the latter in November, it was regarded as desirable to adjourn the matter for six months in view of expenditure which would necessarily be required for the payment of health visitors.

MIDWIVES ACT, 1902.

The following is a summary of the Report on the administration of the above Act during 1914:—

NUMBER OF CERTIFIED MIDWIVES.

The number of certified midwives practising in 1914 was 274, 12 less than in 1913. The numbers practising on their own account have decreased rather rapidly from 156 in 1910 to 118 in 1914, while those acting for Associations have increased from 112 in 1909 to 143 in 1914. The “bona-fide” untrained midwives are gradually decreasing by death and resignation, 37 having died and 37 resigned the certificates since 1905.

PROVISION OF MIDWIVES.

The number of parishes for which the services of no certified midwife were available decreased from 58 at the beginning to 54 (with a population of 24,136) at the end of 1914. The unprovided parishes are:—

Aldsworth, Alveston, Alvington, Arlingham, Aust, Aylburton,
Barnsley, Baunton, Bitton, Breadstone, Brimpsfield,
Cold Ashton, Coln Rogers, Coln St. Dennis,
Daglingworth, Dorsington, Doynton, Duntisbourne Abbots, Duntisbourne Rouse,
Eastington, Edgeworth, Elberton,
Falfield, Frocester,
Hampnett, Hartpury, Hazleton, Hill,
King Stanley,
Lancaut, Leonard Stanley, Littleton-on-Severn,
Marshfield, Marston Sicca, Miserden, Moreton Valence,
Oldbury-upon-Severn, Oxenhall,
Poulton,
Redwick and Northwick, Rockhampton,
South Cerney, Standish, Stratton,
Tortworth, Turkdean, Tytherington,
Wapley and Codrington, Westerleigh, West Littleton, Wheatenhurst, Winstone, Withington, Woolaston.

The “King Edward VII. Memorial” Nurses worked in 15 parishes for 88 weeks.

A certified midwife was newly engaged in the Winchcombe Workhouse, leaving six workhouses in which no certified midwife is employed.

PROPORTION OF BIRTHS ATTENDED BY CERTIFIED MIDWIVES.

The percentage of total births attended by certified midwives in this County is about 54.

STILL BIRTHS.

The proportion of still births again shows an unsatisfactory tendency to increase. Enquiries are being continued, but so far have elicited little useful information; this is one direction in which improvement might be looked for, if a scheme on the lines recommended by the Local Government Board in their Memorandum on "Maternity and Child Welfare" were adopted for the County.

NOTICES OF REQUIRING MEDICAL HELP.

It would appear that there is a distinct tendency towards the exercise of greater caution by certified midwives and towards improved attendance on mothers; this is indicated by a rise in the number of instances in which assistance was sought on account of the baby, and by the reduction in the number of cases for which medical assistance was required for conditions dependent to a certain extent on the skill of the midwife. These changes are probably in some measure due to the alteration in the proportions of trained and untrained midwives; the former in addition to the advantages they have derived from their training are less prone to accept undue responsibility for the mother and child than are the untrained women.

INSPECTIONS.

The number of visits paid was rather less than in previous years. Though there are a few certified midwives who still require as close supervision as possible, the majority of the inspections are largely of a formal character, as everything is found in order; on the other hand, these visits, though formal, are helpful in maintaining a high standard, and the midwives appreciate the interest we take in their work and discuss their cases with us.

The great majority of the 678 inspections during 1914 were made by Miss Lee, who resigned her appointment suddenly after nearly three years' service in the County, at Christmas, 1914, to take up the position of sister in one of the Military Hospitals in Brighton.

The County Nursing Association has appointed Miss L. E. Rogers, formerly Assistant Superintendent of the Northumberland County Nursing Association and Inspector of Midwives, to fill the vacancy temporarily.

I have again pleasure in recording the satisfactory character of the arrangements with the County Nursing Association for the inspection of midwives, and my appreciation of the willing assistance the Hon. Secretary (Mrs. W. Plaync) and the Superintendent have always accorded me.

HEALTH VISITING.

In my Report for 1913 I dealt somewhat fully with this matter, and gave an outline of the proposals which were ultimately considered at a Conference of the County Council with the County Nursing Association on the 7th November, 1914. The general principles were regarded favourably, but as some expenditure would necessarily follow, it was thought desirable in view of the war that consideration of the Scheme should be postponed for six months, and the matter has not yet been settled. Early in the present year, however, effect was given to one part of the proposals by combining the duties of the School Nurses and Tuberculosis Nurses and dividing the County into seven areas, in five of which the nurse undertakes both duties; in one of the two remaining areas a whole-time School Nurse is employed, while the tuberculosis work of both is undertaken by a whole-time Tuberculosis Nurse. The combination of work so far arranged will enable each nurse to gain a fairly close knowledge of the conditions in her area, and prepare the way for the more extended work outlined in the Scheme.

SUMMARIES
OF
ANNUAL REPORTS
OF
Medical Officers of Health, 1914.

AWRE URBAN DISTRICT

71

Area 4,317 Acres. Assessable Value : £9,988. 1d. Rate : £42.

Population 1901	...	1,096
1911	...	1,070
		<hr/>
Decrease 1901-11	...	26 (2.4%)
		<hr/>
Estimated Population 1914	...	1,061
		<hr/>

Medical Officer of Health :

O. W. Andrews, M.B., D.P.H., Deputy Surgeon-General R.N.

CHIEF GEOLOGICAL SUBSTRUCTURES :—Old Red Sandstone, Keuper Marl and Lower Lias.

CHIEF INDUSTRIES:—Agriculture; also colliery population in western portion and fishing in southern part.

HOUSING.

No new houses were erected. Of 10 houses inspected in 1914 eight were found defective, all being remedied. The total inspected in the 4 years, 1911-14, was 113.

SEWERAGE AND SEWAGE DISPOSAL.

There is a complete absence of privies in Blakeney, the administrative centre of the district.

WATER SUPPLY.

Awre has an excellent supply of water, even in the driest weather. At Brain's Green, when the supply of 4 houses fails, an excellent supply can be obtained at a distance of 200 yards.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

One hundred and sixty-six inspections were made of the 33 places on the register, and 1 dairy was improved.

INFECTIOUS DISEASES.

The 3 cases of scarlet fever were notified in Blakeney, on the borders of East Dean, where many mild cases occurred. All were removed to Hospital, one proving fatal.

ISOLATION HOSPITAL.

This district has a share in the Joint Isolation Hospital at Green Bottom.

BUILDING BYE-LAWS.

A new series will shortly be submitted to the Local Government Board.

CHARLTON KINGS URBAN DISTRICT

73

Area 3,399 Acres. Assessable Value : £24,692. 1d. Rate : £103.

Population 1901	...	3,806
1911	...	4,495

Increase 1901-11	...	689 (18.1%)
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Estimated Population 1914	...	4,740
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Medical Officer of Health ... H. M. Meyrick-Jones, M.D.

CHIEF GEOLOGICAL SUBSTRUCTURE: Lower Lias.

CHIEF INDUSTRIES: Residential, and production of milk.

HOUSING.

Sixteen houses were inspected making a total of 77 systematically surveyed. All were found to have defects which have been or are being rectified. The chief defects were the same as those noted last year. Three new houses were built, a low number for this district.

SEWERAGE AND SEWAGE DISPOSAL.

The sewers drain into the Cheltenham system. Nineteen houses were newly supplied with flushing boxes.

REFUSE DISPOSAL.

Reference was made in the last report to the unsatisfactory arrangements for the tipping of refuse, and it is now noted that a refuse destructor is the chief sanitary requirement of the district.

WATER SUPPLY.

No change has been made except that 12 houses were newly connected with the mains.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

Six hundred and seven visits were paid to the 72 places on the registers.

INFECTIOUS DISEASES.

There was an epidemic of scarlet fever of a mild type, resulting in 36 cases. The other cases notified were 7 of diphtheria, 4 of pulmonary tuberculosis and 3 of other forms of tuberculosis, and 1 case each of cerebro-spinal fever and poliomyelitis, both fatal.

ISOLATION HOSPITAL.

All the cases of diphtheria and 35 of the 36 cases of scarlet fever were removed to the Delancey Hospital.

CHELTENHAM BOROUGH

75

Area 4,726 Acres. Assessable Value : £302,060. 1d. Rate : £1,258.

Population 1901	...	49,439
1911	...	48,942
<hr/>		
Decrease 1901-11	...	497 (1.0%)
<hr/>		
Estimated Population 1914	...	49,500
<hr/>		

Medical Officer of Health ... J. H. Garrett, M.D., D.P.H.

CHIEF GEOLOGICAL SUBSTRUCTURE: Lower Lias Clay with beds of sand over about half of the area of the town.

CHIEF INDUSTRIES: Residential town and important educational centre; domestic service, dress-making and tailoring, decorative carving in stone and wood.

HOUSING.

The aspect of the main streets, avenues and squares indicate a comparative richness, with a greater number of houses of large or of very comfortable dimensions than the average, but there is a larger number of quite poor houses; the conditions vary in different wards, the poorest of which is the North Ward. There is a considerable amount of acute poverty and squalor in some of the worst streets, but there is no very great overcrowding of houses and very little overcrowding of houses on space. In Swindon Place is one fairly long row of back-to-back houses and there are a few other short rows of houses with no through ventilation. Six hundred and fifty-eight houses were systematically inspected and 218 were found to have defects requiring notices; 883 of the total 1,044 defects were remedied. The Sanitary Inspector notes that overcrowding is often very difficult to deal with, as the people are frequently very poor and have large families, and find great difficulty in obtaining a house large enough to meet the requirements to avoid overcrowding and at a rent they can afford to pay.

SEWERAGE AND SEWAGE DISPOSAL.

The Disposal Works have been completed, and with the exception of certain subsidiary works the recommendations of the Borough Engineer have been carried out; these subsidiary works are connected with the provision of humus tanks and the prevention of flooding by storm water. Apart from urgent necessary renewals, no progress has been made with the scheme for the re-sewering of the south-eastern district, for which £18,000 was sanctioned by the Local Government Board some years ago.

WATER SUPPLY.

No difference has taken place in the water supply since the last report. There has hardly yet been time to estimate the effect of work done to prevent the growth of troublesome water plants and Dr. Garrett is not advising further expenditure for the present.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

Three thousand seven hundred and thirty-two inspections were made of the 778 places on the register, 2,232 to the slaughter-houses; the latter visits are generally paid in the evening when slaughtering is mostly done and it is endeavoured to make the standard of inspection in the private slaughter-houses equal to that which obtains at the abattoir. Seventeen carcasses were destroyed on account of their being infected with tuberculosis. Milk producers are thought to be somewhat more careful in endeavouring to keep the milk clean, and there may be some improvement in the condition of the animals that yield milk, particularly as regards tuberculosis.

INFECTIOUS DISEASES.

Dr. Garrett says: "The worst feature of the year's record "is the continuance of the prevalence of scarlet fever from the "year before last and of other throat affections;" the number of cases was 328, 7 less than in 1913. The disease was of

a mild type and caused only one death. Dr. Garrett makes interesting observations on this infection, some of which are given in an earlier section of the Report (see page 22).

The number of notifications of cases of diphtheria received was the largest on record, namely 103, about double the average of the 25 years; all the cases with few, if any, exceptions exhibited definite clinical signs. There were 12 deaths, all in the persons of children, that is nearly 12 % of those notified; reference is made to bacteriological examinations and Dr. Garrett says, that "the case death rate will naturally be much lower where cases are called diphtheria upon bacteriological evidence without due reference to clinical signs."

Of the 17 cases of typhoid fever, several appeared to have been contracted outside the borough and 12 of the 17 occurred when no part of the water supply was from the river source.

One case of cerebro-spinal fever was notified.

In connection with the scheme for the treatment and prevention of tuberculosis Dr. Garrett reports on the work done in Cheltenham during the year, and says, "it will of course require some considerable number of years to pass before any comparisons can be made that may suggest diminution or increase."

ISOLATION HOSPITAL.

Dr. Garrett gives a brief account of the Delancey Hospital which was unique—so far as I am aware—as being the only provincial isolation hospital founded and carried on as a charitable institution. The hospital has now been transferred to a Joint Hospital Board, constituted by representatives of the Town Council, and Charlton Kings Urban and Cheltenham Rural District Councils; the Local Government Board approved of the transfer subject to the proviso that cases of small-pox should not be treated on the site.

STATISTICS.

The birth rate is very low; three years ago it dropped suddenly about 12 % below the already low average and has not risen again since; the illegitimate birth rate (6.9 %) is above the 10 years' average (6.1 %). Dr. Garrett discusses the possibility of reduction of death rates in some detail.

TROOPS.

During the winter two Battalions of the Gloucester Regiment were billeted in nearly 40 large empty houses and a section of the Army Service Corps in small occupied houses. Co-operation was maintained between the Military and Sanitary Authorities. The quarters were visited weekly by the Sanitary Inspector and the food supply was also inspected. After coming to Cheltenham from camp a severe catarrh of influenza type attacked the men, but only few cases were serious. No case of enteric fever occurred, but two were notified as scarlet fever and one case was thought to be diphtheria.

REFUGEES.

A number of Belgian Refugees have found a temporary domicile in Cheltenham. On the advice of Dr. Garrett arrangements were made for the medical examination of and attendance on the refugees by the managing Committee; no difficulty arose with respect to infectious diseases beyond the report of one person having been in contact aboard ship with a small pox case.

CIRENCESTER URBAN DISTRICT

79

Area 5,286 Acres. Assessable Value : £36,004. 1d. Rate : £150.

Population 1901	...	7,536
1911	...	7,631
		<hr/>
Increase 1901-11	...	95 (1.3%)
		<hr/>
Estimated Population 1914	...	7,662
		<hr/>

Medical Officer of Health: M. Ashley, M.B., D.P.H.

CHIEF GEOLOGICAL SUBSTRUCTURE: Great Oolite.

CHIEF INDUSTRIES: Residential and market town with brewery, flour mills, cast iron foundry and bacon factory.

HOUSING.

There were 1,851 occupied and 50 void houses. Many are very unsatisfactory; some of them may be renovated but it would appear to be impossible to make them satisfactory, and there is a pressing need for better houses. Dr. Ashley says the necessity seems to be generally recognised, but adds, "there is no prospect of further building being undertaken by the Council in the immediate future." He therefore desires more progress in dealing with such houses as it would be practicable to improve. All 14 houses inspected during 1914 were found to be defective but in no single instance had the defects been remedied. Nine houses were condemned but no closing orders were made.

SEWERAGE AND SEWAGE DISPOSAL.

A stoppage in the sewer in Park Street required much work to remove satisfactorily.

RIVERS POLLUTION.

Owing to complaints by the Thames Conservancy Board as to pollution of the Churn, the surface water drain, near

Cricklade Road, to which certain house drains had been connected, had to be diverted.

REFUSE DISPOSAL.

The refuse tip is open to serious objection from its proximity to the hospital, and should be abandoned as soon as the proposed motor vehicle is obtained.

WATER SUPPLY.

Of 1,851 occupied houses, 1,086 are connected with the mains; the remaining 765 are dependent on shallow wells. The water from the latter should be examined more frequently so that the substitution of the town water might be proceeded with more rapidly. Pollution of the wells by such blockage of drains as that mentioned above has been recorded in previous reports as being the cause of cases of typhoid fever.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

The numbers of these places are the same as in the previous year—90; 164 inspections were made during 1914. The one common lodging-house is old and considerable alterations, for which notices have been given, are required to make it satisfactory. Many of the bakehouses are unsatisfactory and need more attention.

INFECTIOUS DISEASES.

Diphtheria was prevalent during the year, the maximum number of cases of 31 being notified; the parts specially affected were Watermoor and Gloucester Street. Suspicion attached to a milk supply as being responsible for a considerable number of cases both of scarlet fever and diphtheria but the spread appears to have been attributed mainly to school infection. The diphtheria fatality was high, 5 deaths resulting. The case of typhoid fever was not confirmed by an examination of the blood. Dr. Ashley gives an outline of the County scheme for dealing with tuberculosis and mentions the opening of the Dispensary in Cirencester during 1914.

ISOLATION HOSPITAL.

For many years past attention has been called to the very unsatisfactory character of the accommodation for cases of infectious disease, namely an adapted house at Chesterton. Dr. Ashley now reports that in default of providing an up-to-date Hospital, a new brick and stone block with 12 beds is being erected near the present house and that a permanent assistant nurse will be engaged. This will enable both scarlet fever and diphtheria to be treated at the same time. The town refuse tip is close to the Hospital and is very objectionable.

TROOPS.

Some 2,000 troops were billeted in the town, partly in private houses and partly in three large public buildings; in the latter, pail closets were provided and urinals were erected and connected with the sewers. Arrangements were made for intercommunication as to the occurrence of cases of infectious disease; 2 cases of small-pox which occurred were removed to the Swindon Isolation Hospital.

Area 2,060 Acres. Assessable Value : £6,468. 1d. Rate : £27.

Population 1901	...	2,541
1911	...	2,604
		<hr/>
Increase 1901-11	...	63 (2.5%)
		<hr/>
Estimated Population 1914	...	2,624
		<hr/>

Medical Officer of Health ... J. R. Payne, M.R.C.S.

CHIEF GEOLOGICAL SUBSTRUCTURE: Coal Measures.

CHIEF INDUSTRIES: Coal and iron mining, quarrying and agriculture.

HOUSING.

Two hundred and twenty-nine houses were inspected by the Sanitary Inspector and 65 by Dr. Payne; of 98 found to be defective, 90 were remedied on notice. Seven were unfit for habitation; 5 were made fit and closing orders were issued with respect to 2. The housing accommodation is very inadequate; a site has been obtained on Lord's Hill and the Council have decided to build 12 houses.

SEWERAGE AND SEWAGE DISPOSAL.

The state of the drainage is a matter which needs to be gone into carefully and systematically, and Dr. Payne urges that a complete scheme should be prepared by an engineer: he says this would lead to considerable saving of money as work done now would not have to be repeated at some future date. At the present time the brook performs the duties of a sewer and there are 228 closets with fixed receptacles and 190 with movable receptacles in the town; the latter are emptied twice weekly by the scavenger.

RIVERS POLLUTION.

The brook receives all drainage and runs for a considerable distance under houses.

REFUSE DISPOSAL.

Refuse is collected twice weekly by the scavenger.

WATER SUPPLY.

The public supply is derived from a stream in the coal measures, and the water after passing through a sand filter is collected in a receiver. Nowhere in Coleford itself does the water rise appreciably above the ground floor, and the outlying parts are at a still higher level. Of these, Scowles is supplied from water collecting in bays of an old coal mine cutting, Berry Hill from a well at a long distance from many houses, and Lane End and Milkwall from wells and rain water tanks. The provision of an adequate supply is one of the chief sanitary requirements of the district; a loan of £200 was sanctioned by the Local Government Board for the clearing of the Millpound Pit, but though sufficient water is said to have been found the water was condemned on two occasions.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 2 common lodging-houses (an increase of 1), 3 slaughter-houses, 21 dairies, &c. (an increase of 2), 9 bake-houses and 23 other workshops, of which 250 inspections were made. The cows are said to be kept under good conditions but too great care with regard to cleanliness cannot be taken by those who have to handle the milk supply.

INFECTIOUS DISEASES.

The 7 cases of diphtheria were scattered over the district. Five cases of enteric fever were notified from 2 houses; the cases in 1 house "were practically certainly due to sewer gas escaping from the sewer to the scullery," while the others were imported from Southampton.

ISOLATION HOSPITAL.

Unfortunately there is no isolation hospital. The need is more urgent every year and, as an instance, the Scowles School was closed because it was impossible to remove the patient suffering with scarlet fever from the School House. Had any epidemic broken out amongst the soldiers quartered in Coleford there would have been no means of isolating them.

SANITARY WORK.

Owing to the resignation of the Sanitary Inspector and the illness of Dr. Payne for the first months of the year the sanitary work was much impeded.

Area 1,530 Acres. Assessable Value : £31,092. 1d. Rate : £129.

Population 1901	...	11,961
1911	...	12,700
		<hr/>
Increase 1901-11	...	739 (6.2%)
		<hr/>
Estimated Population 1914	...	12,958
		<hr/>

Medical Officer of Health ... C. J. Perrott, L.R.C.P., I.

CHIEF GEOLOGICAL SUBSTRUCTURE: Coal Measures.

CHIEF INDUSTRIES: Entirely working-class population—boot making, stay making, motor bicycle manufacture and coal mining (one colliery in south of district).

HOUSING.

There was a change in the appointment of the Sanitary Inspector, and the inspection of houses during 1914 was not commenced until November. The number inspected was 24; 22 were defective, 7 being remedied. Seventeen houses were built.

SEWERAGE AND SEWAGE DISPOSAL.

Forty-six houses were newly connected with the sewers.

REFUSE DISPOSAL.

From the return issued by the Local Government Board over 95 % of the receptacles are moveable; the refuse is collected in open carts and deposited on a tip.

WATER SUPPLY.

The West Gloucestershire Water Company supply most of the houses in the District, 21 being newly connected. During 1914 they opened up their reserve supply at California, and installed a pumping, softening and filtering plant and also constructed a second supply main to Regent Street, thereby con-

siderably improving the pressure and affording an alternative route for the water. Owing to certain difficulties, partly due to the war, the hardness of the California water at times exceeded 18° of hardness.

The Company are pushing ahead with the preliminary works in connection with the new source at Shipton Moyne.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

The number of these was the same as in the previous year; 786 inspections were made. The cowsheds and dairies are reported on favourably as a whole.

INFECTIOUS DISEASES.

The 50 cases of scarlet fever were of a mild type and most occurred in the first two months of the year in continuation of the outbreak at the end of 1913. Six of the 22 cases of diphtheria were fatal, 2 of the deaths occurring in institutions to which the patients had been removed for operative treatment.

ISOLATION HOSPITAL.

The arrangements for the use of 8 beds in the Warmley Isolation Hospital were satisfactory during 1914 as the district did not suffer from any epidemic. Nine cases (5 of diphtheria and 4 of scarlet fever) in which satisfactory home treatment was uncertain were removed to hospital.

INFANTILE MORTALITY.

The reduction in the infantile mortality from an average of 103 in the previous five years to 53 in 1914 is attributed, in great measure, to the improved instruction to and greater help available for young mothers.

SANITARY INSPECTOR.

Mr. H. Glynn Warne succeeded Mr. A. H. Brain whose appointment ended on the 30th September.

Area 1,596 Acres. Assessable Value : £10,552. 1d. Rate : £44.

Population 1901 ... 3,028

1911 ... 3,031

Increase 1901-11 ... 3 (.1 %)

Estimated Population 1914 ... 3,109

Medical Officer of Health ... R. Green, M.D., D.Hy.

CHIEF GEOLOGICAL SUBSTRUCTURES: Upper Lias to Great Oolite.

CHIEF INDUSTRIES: Market town with leather board works, flock mill, stick works, bacon factory and corn mill.

HOUSING.

Of 70 houses inspected 33 were found defective, but none unfit for habitation. The question of building houses was considered but it was decided that any demand could be met by private enterprise.

SEWERAGE AND SEWAGE DISPOSAL.

Fifty-two houses were connected with the sewers making a total of 361, practically half of the houses in the district, namely 774. There are some isolated groups for which a sewer is not available, and in these cases dry closets are put in; 32 privy vaults were abolished.

RIVERS POLLUTION.

Pollution from sewers and privies has been largely remedied, but is still caused by the washings from various factories, some outside the district.

REFUSE DISPOSAL.

The contractor carried out his duties satisfactorily and no complaints of nuisance were received.

WATER SUPPLY.

The extremely dry weather in the autumn caused some shortage for a time; the new service reservoir at Forest Green was opened and is a great advantage to houses in the higher parts.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

The number of these was the same as in the previous year, 63; 169 inspections were made. Most were reported to be in a satisfactory condition. Comment is made on the fact that though large numbers of pigs are killed at the bacon factory no cases of tuberculosis appear to be found; it is said this is very unusual and suggests that local pigs must be a very healthy sort.

INFECTIOUS DISEASES.

The number of cases (20) was almost the same as last year. Nine cases of scarlet fever occurred but it was not epidemic at all; 8 were removed to the hospital. No case of diphtheria was reported, the first time for 8 years.

Most of the 8 cases of tuberculosis were seen at the Dispensary in Stroud and 2 were sent to the Sanatorium. Flasks, handkerchiefs and disinfectants are supplied.

ISOLATION HOSPITAL.

Plans have been approved for a tuberculosis block at the Joint Isolation Hospital.

Area 1,937 Acres. Assessable Value : £8,988. 1d. Rate : £37.

Population 1901	...	1,184
1911	...	1,021
<hr/>		
Decrease 1901-11	...	163 (13.8%)
<hr/>		
Estimated Population 1914	...	969
<hr/>		

Medical Officer of Health:

O. W. Andrews, M.B., D.P.H., Deputy Surgeon-General R.N.

CHIEF GEOLOGICAL SUBSTRUCTURE: Keuper Marl.

CHIEF INDUSTRIES:—Agricultural and residential.

HOUSING.

Of 10 houses inspected 3 were found to contain defects, which were all remedied. The total number inspected is 154. There is no evidence of deficiency.

SEWERAGE AND SEWAGE DISPOSAL.

Six new flushing cisterns were provided.

WATER SUPPLY.

Repairs in connection with the proprietary supply have been carried out, and it is believed that an adequate supply is now ensured. From the return issued by the Local Government Board 76 of the total 250 houses were connected.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

One hundred and thirteen visits were paid to the 29 places on the registers.

INFECTIOUS DISEASES.

The only cases notified were one each of scarlet fever and tuberculosis, the former being removed to the Isolation Hospital.

ISOLATION HOSPITAL.

This district has a share in the Joint Isolation Hospital at Green Bottom.

BYE-LAWS.

New Building Bye-laws have been adopted.

STOW-ON-THE-WOLD URBAN DISTRICT 91

Area 45 Acres. Assessable Value : £3,452. 1d. Rate : £14.

Population 1901	...	1,386
1911	...	1,301

Decrease 1901-11	...	85 (6.1%)
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Estimated Population 1914	...	1,290
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Medical Officer of Health ... E. Dening, M.R.C.S.

CHIEF GEOLOGICAL SUBSTRUCTURE: Great Oolite.

CHIEF INDUSTRIES: Agriculture; masons and carpenters.

HOUSING.

Of 26 houses inspected 10 were found to have defects, such as dampness from bad roofs and unopening windows, which were remedied. The whole district has been gone over and a second inspection has been commenced.

SEWERAGE AND SEWAGE DISPOSAL.

The only houses sewered are those round the water works; others drain to cesspools.

REFUSE DISPOSAL.

The system of scavenging is a great benefit. The tip in the quarry at the workhouse is always smouldering.

WATER SUPPLY.

The analysis has not varied. Half the houses are still dependent on standpipes.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

The number of these was the same as in 1913, 21; they were all found in good order.

INFECTIOUS DISEASES.

The only cases notified were 3 of scarlet fever, the end of the epidemic in 1913.

ISOLATION HOSPITAL.

There is none, and it is again noted that the advantages of a combined hospital might be shared.

SANITARY INSPECTOR.

The Sanitary Inspector was called up for service on the outbreak of war and a deputy was appointed who has carried out his duties in an efficient manner.

STROUD URBAN DISTRICT

93

Area 1,163 Acres. Assessable Value : £35,772. 1d. Rate : £149.

Population 1901' ... 9,153

1911 ... 8,767

Decrease 1901-11 ... 386 (4.2%)

Estimated Population 1914 ... 8,767

Medical Officer of Health ... R. Green, M.D., D.Hy.

CHIEF GEOLOGICAL SUBSTRUCTURES: Middle Lias to Inferior Oolite.

CHIEF INDUSTRIES: Centre of West of England cloth manufacture, ready-made clothing factories, breweries, &c.

HOUSING.

Of 60 houses inspected 34 were found defective and 7 unfit for habitation; no closing orders were issued. Many of the older houses are apt to be damp owing to absence of damp-course, being built into the bank, or the old stone roofs being leaky.

A plot of ground for the erection of houses has been purchased at Uplands but so far no further progress has been made.

SEWERAGE AND SEWAGE DISPOSAL.

On the whole the district is fairly satisfactory, but owing to the absence of a sewer the drainage at Bowbridge and Pagan Hill is still bad; so far no arrangement has been made for the use of the sewers in the Rural District.

The new biological sewage works have been completed and the Council can confidently look forward to economical working and a good effluent.

RIVERS POLLUTION.

All the streams receive trade and other pollution; the water is not used for domestic purposes and the main stream enters a tidal river.

REFUSE DISPOSAL.

The scavenging is well carried out and the refuse destructor which has now been in use many months is efficiently doing its work. The general provision of covered sanitary dust bins is again recommended.

WATER SUPPLY.

The dryness of the first half of the year caused the supply to be on the short side in the autumn; water was pumped from Gainey's well to the upper reservoirs, and a supply was procured from the Stroud Water Company. Softening the town water has been under consideration but so far no action has been taken; soft water has economic and hygienic advantages.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 5 common lodging-houses, 9 slaughter-houses, 22 dairies, &c., 17 bakehouses (an increase of 3), 102 workshops (an increase of 19), 113 outworkers' premises (a large increase) and 2 tripe boilers' establishments. It is again said that the common lodging-houses are too numerous and attract many undesirables; generally they are well kept, but the management at one house is far from satisfactory. If the latter is not improved, the house will be closed.

INFECTIOUS DISEASES.

Measles, diphtheria and scarlet fever were all prevalent and the former two diseases were very severe in form. The outbreak of scarlet fever began in the autumn of 1913 and continued through 1914, 115 cases being notified; all parts of the town, especially the upper part were affected. The disease was largely spread in the schools; on the whole it was of a mild type.

The majority of the cases of diphtheria cropped up in the second half of the year; 7 of the 54 cases were fatal. In one school there were 21 cases and the chief cause of the spread appears to have been the attendance of "carriers" at school; a large number of swabs were taken and the worst "carriers" were those with enlarged tonsils and adenoids.

In all notified cases of tuberculosis enquiries are made, the houses are inspected, printed directions are given, and disinfectants, spit flasks and paper handkerchiefs are supplied when necessary; the Tuberculosis Dispensary has been of great assistance both to the patients and medical men in the district. Five of the 14 cases were sent to the Sanatorium and some patients were treated with tuberculin.

ISOLATION HOSPITAL.

The year has been an extremely busy one owing to the unusual prevalence of scarlet fever and diphtheria, 290 cases being admitted; on the whole they were of a severe type, the case fatalities being 3.8 % for scarlet fever and 15.1 % for diphtheria.

A tuberculosis block of 12 beds will be erected very shortly.

HEALTH VISITOR.

The suggested appointment of a Health Visitor has fallen through as the County Council have now combined the duties of School and Tuberculosis Nurses.

Area 114 Acres. Assessable Value: £5,636. 1d. Rate: £24.

Population 1901	...	1,989
1911	...	1,758
		<hr/>
Decrease 1901-11	...	231 (11.6%)
		<hr/>
Estimated Population 1914	...	1,689
		<hr/>

Medical Officer of Health: M. Ashley, M.B., D.P.H.

CHIEF GEOLOGICAL SUBSTRUCTURE: Great Oolite.

CHIEF INDUSTRIES: Market town: brewing.

HOUSING.

In the early part of the year an inspection was made by Dr. Carnwath, of the Local Government Board, and as a result the Board suggested that the Council should provide 10 to 15 houses, and drew attention to the inadequate action of the Council in dealing with the question of housing. Many of the houses are bad and cannot be made really satisfactory. The position at the end of the year was that closing orders had been made with respect to 12 bad houses, that some defective houses had received more attention than previously, and that there were 20 to 30 vacant houses in the town; one cause of delay in repairing houses is again said to be dearth of labour. Dr. Ashley concludes by saying that it is doubtful if the statutory notices served on 5 owners with respect to 12 houses will be followed up by taking the cases into court, and that more effective action is practicable by using powers under the Housing Acts rather than under the Public Health Acts, 1875.

SEWERAGE AND SEWAGE DISPOSAL.

A sewer was laid to drain the houses in Charlton Road out of a loan of £200; by the end of the year one house had been connected. The remaining 30 will shortly be connected and

there will be very few closets in the town besides water closets.

WATER SUPPLY.

The deficient supply available from the water works has been a source of anxiety for many years, and during 1914 the deficiency was accentuated. Early in the year a loan of £750 was sanctioned for sinking a new well in Chavenage Lane, which at 70 feet yielded so little water that it was abandoned; after a conference with the Local Government Board a loan of £3,313 was sanctioned for sinking a 14-inch bore hole to a depth of 400 feet at the site of the present works. It is mentioned that though this district is not included in the limits of supply of the West Gloucestershire Water Company, water might be obtained from them, if desirable.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

The number of these was the same as in the previous year—42; 60 inspections were made. Very extensive alterations will be necessary to render the two common lodging-houses (old adapted dwellings) really suitable for the purpose; the bake-houses also require much attention to make them satisfactory.

INFECTIOUS DISEASES.

The two cases of scarlet fever originated outside the district; that of enteric fever became infected in the common lodging-house and was removed to the Workhouse Infirmary.

ISOLATION HOSPITAL.

There is no hospital. Some arrangement with the Cirencester Districts was desired but there was no spare accommodation, and Dr. Ashley sees no prospect of any provision being made unless the County Council exercise their powers.

Area 2,532 Acres. Assessable Value : £22,664. 1d. Rate : £94.

Population 1901	...	5,419
1911	...	5,287
<hr/>		
Decrease 1901-11	...	132 (2.4%)
<hr/>		
Estimated Population 1914	...	5,260
<hr/>		

Medical Officer of Health: A. Fowell-Turner, L.R.C.P. Ed.

CHIEF GEOLOGICAL SUBSTRUCTURES: Keuper Marl, Lower Lias and Alluvium.

CHIEF INDUSTRIES: Flour mills, collar and shirt factory, builders' yards and agriculture.

HOUSING.

Of 80 houses inspected 54 were found defective. The total number inspected in 4 years has been 327, leaving 673 to be done. During 1913 the Council applied for a loan to build 30 houses; 12 of these are nearly ready and the completion of the scheme is urged.

SEWERAGE AND SEWAGE DISPOSAL.

Twenty houses were newly connected with the sewers, and 18 closets were provided with flushing cisterns.

RIVERS POLLUTION.

No pollution occurred during the year.

REFUSE DISPOSAL.

The collection was, as usual, thoroughly carried out. From the return issued by the Local Government Board 80 % of the refuse is deposited on a tip, and 20 % is mixed with the sewage sludge and sold to farmers.

WATER SUPPLY.

The town is supplied by the Cheltenham Corporation, 9 houses being newly connected with the mains during the year. During the 10 years ending 1908 300 houses were newly connected, and from the return (revised to January, 1914) issued by the Local Government Board 894 of the total 1,204 houses were so supplied.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

Ninety-three inspections were made of the 73 places on the registers, the conditions being reported as satisfactory.

INFECTIOUS DISEASES.

The number of cases of scarlet fever (22) was larger than in any year since 1909, but there was no extensive epidemic; 21 cases were removed to hospital. There were also many cases of chicken-pox and mumps, but it was not necessary to close any schools.

ISOLATION HOSPITAL.

The new buildings were completed and electric lighting was provided. The caretaker's wife undertakes the laundry work.

100 WESTBURY-ON-SEVERN URBAN DISTRICT

Area 8,257 Acres. Assessable Value : £17,448. 1d. Rate: £73.

Population 1901	...	1,866
1911	...	1,812
		<hr/>
Decrease 1901-11	...	54 (2.9%)
		<hr/>
Estimated Population 1914	...	1,796
		<hr/>

Medical Officer of Health:

O. W. Andrews, M.B., D.P.H., Deputy Surgeon-General R.N.

CHIEF GEOLOGICAL SUBSTRUCTURES: Keuper Marl and Lower Lias.

CHIEF INDUSTRY: Agriculture.

HOUSING.

All 12 houses inspected were found to be defective, 9 being remedied on notice. The total number inspected is 160. Two new houses were built.

SEWERAGE AND SEWAGE DISPOSAL.

Twelve privy vaults were abolished and 12 improved closets were constructed.

WATER SUPPLY.

There is no public supply.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 2 slaughter-houses, 24 dairies, &c. (an increase of 4), 6 bakehouses and 5 workshops; 158 inspections were made.

INFECTIOUS DISEASES.

The 3 cases of scarlet fever occurred in one house in September and were all removed to Hospital. The one case of tuberculosis notified was treated in the Sanatorium.

ISOLATION HOSPITAL.

This district has a share in the Joint Hospital at Green Bottom.

BYE-LAWS.

Revised Building Bye-laws will shortly be submitted to the Local Government Board.

Area 23,726 Acres. Assessable Value : £31,912. 1d. Rate : £133.

Population 1901	...	5,441
1911	...	5,597

Increase 1901-11	...	156 (2.9%)
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Estimated Population 1914	...	5,655
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Medical Officer of Health ... G. Findlay, M.A., M.B.

CHIEF GEOLOGICAL SUBSTRUCTURES: Lower Lias to Inferior Oolite.

CHIEF INDUSTRIES: Entirely agricultural: market gardening at Mickleton.

HOUSING.

Systematic inspection of houses has been steadily carried on, a total of 728 houses having been examined. The number inspected during 1914 was 167, at Todenham and Ebrington; 127 were found with defects requiring notice and 80 were remedied. Three houses, unfit for habitation, were closed voluntarily. The 4 cottages built by the Council at Mickleton continue to pay their way at an inclusive rental of 3s 4d. per week; 2 more were built privately. Owing to the war no houses will be built at present at Chipping Campden and Moreton-in-the-Marsh, but plans for 12 at the latter place at a cost of £2,200 had been prepared. So many men have joined the army that there is not at present the same demand for cottages.

SEWERAGE AND SEWAGE DISPOSAL.

CHIPPING CAMPDEN.—Consideration postponed owing to the war.

MORETON-IN-THE-MARSH.—The system of irrigation was not working satisfactorily and alterations are being made.

QUINTON.—Complaints were received of pollution of cattle drinking places by discharge of sewage; the matter is now under consideration.

REFUSE DISPOSAL.

In the course of the housing inspection, heaps of refuse are often found close to houses, forming breeding places for flies which often contaminate food. Immediate removal is urged but systematic scavenging should be arranged at Chipping Campden and Moreton-in-the-Marsh.

WATER SUPPLY.

ADMINTON.—There was some scarcity during the dry season, partly due to blocking of the collecting pipes; negotiations for an extension of the supply were dropped for the time when the yield increased with rain.

BOURTON-ON-THE-HILL.—No scheme can be suggested except at a prohibitive cost.

CHIPPING CAMPDEN.—The alterations have had a satisfactory effect and there have been no complaints of discolouration.

MORETON-IN-THE-MARSH.—Alterations and improvements were made at the pumping station at Swell Mill, partly at the cost of the owner of the springs, Mr. Fenwick.

From the return of the Local Government Board 3 of the 12 parishes are supplied by the Council, 6 by private supplies, 1 partly by the Council and partly by the landowner, and in two there is no general supply; as regards the two last Dr. Findlay says there was plenty of water, in Ebrington from the springs and in Todenham from wells.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

The number of these has been increased by 2 cowsheds, making a total of 129, all of which were inspected during 1914. The dairies and cowsheds are in fairly good condition;

the latter are mostly open. Slaughter-houses are fairly well kept, and only two notices were necessary for the lime-washing of bakehouses.

INFECTIOUS DISEASES.

Three sporadic cases of diphtheria were notified and 10 cases of scarlet fever in 6 parishes, 5 of the 10 cases being well isolated at home. The 2 cases of enteric fever could not be traced; both were fatal. Of the 14 known cases of tuberculosis, 8 had received Sanatorium Benefit. Visits are paid, and disinfectants and pocket spittoons are supplied. A Tuberculosis Dispensary was opened at Moreton-in-the-Marsh Cottage Hospital Isolation Block on the 19th March, 1914. Whooping cough was prevalent at Moreton-in-the-Marsh in the spring, and the Infant School was closed for a short time.

ISOLATION HOSPITAL.

An isolated house at Lapstone, near Chipping Campden, has been adapted for isolating 3 or 4 patients, and a caretaker has been appointed and lives in part of the house. It might be very useful in an emergency. Tents for small-pox are stored with a tent maker at Moreton-in-the-Marsh.

BYE-LAWS.

Dr. Findlay has for many years recommended the adoption of Bye-laws with respect to the cleansing of privies, &c., for Chipping Campden and Moreton-in-the-Marsh, and says some with respect to slaughter-houses would be beneficial.

CHELTENHAM RURAL DISTRICT

105

Area 18,401 Acres. Assessable Value : £37,216. 1d. Rate : £155.

Population 1901	...	4,637
1911	...	5,254

Increase 1901-11	...	617 (13.3%)
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Estimated Population 1914	...	5,440
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Medical Officer of Health ... J. F. Johns, M.D., D.P.H.

CHIEF GEOLOGICAL SUBSTRUCTURES: Lower Lias to Inferior Oolite.

CHIEF INDUSTRIES: Agriculture; residential neighbourhood.

HOUSING.

Of 50 houses inspected 37 were found to have defects, 33 being remedied; one house was unfit for habitation. It is said that the housing inspection makes satisfactory progress towards completion. There was a considerable check in the building of new houses—only 4 being built during the year—but no special demand for cottages or workmen's dwellings exists.

SEWERAGE AND SEWAGE DISPOSAL.

Leckhampton, Up-Hatherley, Prestbury and Shurdington for the greater part drain to efficient disposal works which are properly fulfilling their purpose. In the more rural parts cesspits are used; there has been very little advance in the substitution of movable receptacles for the remaining old-fashioned privies.

REFUSE DISPOSAL.

No progress has been made. The necessity for proper bye-laws and Council control becomes yearly more important with the increase of small villa residences.

WATER SUPPLY.

From the return issued by the Local Government Board in 5 of the 11 parishes there are public supplies and in 2 private supplies; 4 are supplied partly by public and partly by private works. In some parishes only comparatively few houses appear to be connected. The hill waters are hard, and those from wells in the vale contain large amounts of saline and are not altogether free from possible sources of pollution.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 1 slaughter-house, 28 dairies, &c. (a decrease of 3), 4 bakehouses and 1 gut factory. All the dairies and cowsheds are improved and satisfactory as regards the buildings, but the water supplies are in some instances somewhat uncertain; steps are taken as far as possible to safeguard the existing supplies.

INFECTIOUS DISEASES.

Infectious diseases were more generally epidemic, especially scarlet fever, towards the end of the year; 23 cases occurred, and 22 were removed to the hospital. Two of the 9 cases of diphtheria were fatal.

ISOLATION HOSPITAL.

The accommodation at the Delancey Hospital has so far been ample.

TROOPS.

No troops were stationed in the district, but the Race Course Buildings have been adapted as a Military Hospital.

CHIPPING SODBURY RURAL DISTRICT 107

Area 69,736 Acres. Assessable Value: £113,192. 1d. Rate: £472.

Population 1901	...	22,104
1911	...	20,955
<hr/>		
Decrease 1901-11	...	1,149 (5.2%)
<hr/>		
Estimated Population 1914	...	20,493
<hr/>		

Medical Officer of Health: T. Rhind, M.R.C.S., D.P.H.

CHIEF GEOLOGICAL SUBSTRUCTURES: Coal Measures and Lower Lias Clay.

CHIEF INDUSTRIES: Mainly agricultural, with collieries on the borders of Bristol, and tailoring home work by women in Winterbourne and Frampton Cotterell.

HOUSING.

There was a very great increase in the number of houses inspected, from 491 in 1913 to 1,228 in 1914, 652 being found to be defective; 402 were remedied. Additional housing is required in some parishes, and a scheme for 12 at Frampton Cotterell was prepared, but is now in abeyance owing to the war.

SEWERAGE AND SEWAGE DISPOSAL.

Small improvements were made at Chipping Sodbury, Filton, Old Sodbury and Pucklechurch, on account of purely local conditions.

REFUSE DISPOSAL.

Scavenging should be carried out in all parts of the district; at present it is not undertaken anywhere.

WATER SUPPLY.

From the Return issued by the Local Government Board 16 of the 26 parishes are supplied in whole or in part by the

West Gloucestershire Water Company, 2 by private supplies, and 1 partly by the Company and partly by a private supply. In the 7 remaining parishes the population is dependent on wells. During 1914 the Company's mains were extended to the main portion of Westerleigh, and the Company obtained powers to extend their supply.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 1 common lodging-house, 19 slaughter-houses (a decrease of 1), 129 dairies, &c. (a decrease of 6), 38 bake-houses (a decrease of 2) and 126 workshops; the number of outworkers shews an increase from 96 in 1913 to 206 in 1914; 793 inspections were made. The dairies were well kept, but the cowsheds showed a large margin for improvement.

INFECTIOUS DISEASES.

The number of cases of diphtheria (23) was lower than in any year since 1909, but scarlet fever had not been so prevalent since 1899. The type of the latter disease was very mild and therefore difficult to control; there were many unrecognised cases but some of them were detected on examination. Four of the 5 cases of enteric fever were infected outside the district, 1 of them being a Territorial soldier coming from a part where the disease was fairly prevalent; it was regarded as fortunate that more cases were not thus introduced.

Records are given of the use made of the Tuberculosis Dispensary at Warmley, showing the advantage that is taken of it: the visits of the County Nurses are of great assistance.

ISOLATION HOSPITAL.

No changes have been made.

BYE-LAWS.

A revision of the Bye-laws is in contemplation.

TROOPS.

Troops were billeted in the district, and in view of the crowded state of the billets and the large amount of refuse created, a handbill was distributed to householders advising precautions as to its disposal.

Area 80,991 Acres. Assessable Value: £58,772. 1d. Rate: £245.

Population 1901	...	12,084
1911	...	12,746
		<hr/>
Increase 1901-11	...	662 (5.5%)
		<hr/>
Estimated Population 1914	...	12,946
		<hr/>

Medical Officer of Health: M. Ashley, M.B., D.P.H.

CHIEF GEOLOGICAL SUBSTRUCTURES: Forest Marble, Great Oolite and Oxford Clay.

CHIEF INDUSTRIES: Agriculture, especially sheep breeding and production of milk.

HOUSING.

After an inspection had been made by Dr. Carnwath, the Local Government Board suggested that houses should be built in Daglingworth, Fairford, Kempsford, North Cerney, Sapper-ton, South Cerney and Winstone, and referred to the unsatisfactory arrangements for the drainage of many houses, the liability of the water supplies to pollution, the frequency of privy vaults and the desirability of systematic scavenging in larger villages, *e.g.*, Fairford and Stratton. The communications were referred to a Committee and on their recommendation it was decided to erect two cottages each in Ampney Crucis, Daglingworth, Fairford, Siddington and South Cerney to be let at 4s. 6d. to 5s. per week.

The inspection of houses in Driffield, Harnhill and Preston has been completed and has been commenced in South Cerney. Of 164 houses inspected during 1914 88 were found defective and 80 were remedied; 39 were unfit for habitation and 34 closing orders were issued; 6 were made habitable and 6 voluntarily demolished.

SEWERAGE AND SEWAGE DISPOSAL.

FAIRFORD.—Complaints were received from the Thames Conservancy Board and arrangements were made for the extension of two sewers.

KEMPSFORD.—Similar complaints were met by diverting certain slop drains.

POULTON.—The tanks and filters were cleaned and the coke renewed.

PRESTON.—The improvements made in 1913 appear to be satisfactory.

SIDDINGTON.—The Council recommended the Parish Council to provide an efficient system of drainage, but no reply was received by the end of the year.

STRATTON.—No complaints were received.

RIVERS POLLUTION.

Complaints were received from the Thames Conservancy Board, as above.

REFUSE DISPOSAL.

Systematic scavenging should be undertaken in some of the larger villages and was suggested to the Parish Councils of Fairford and Stratton (on the recommendation of the Local Government Board) and Siddington, but no action had resulted. At Stratton a man is now employed to cover the fresh refuse on a public tip with earth and this appears to have abated the nuisance.

WATER SUPPLY.

A summary is given of the supplies in each of the 36 parishes in the district; 3 are supplied in whole or part by the District Council, 18 have private supplies, and in 13 there is no general supply. Many of the supplies are apparently

very satisfactory, but the circumstances of the following parishes appear to require attention.—Ampney S. Peter, Barnsley, Brimpsfield, Duntisbourne Abbots, Poulton, Siddington and Winstone.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

There has been an increase in the number from 156 to 164, namely 3 dairies, &c., 1 bakehouse and 4 workshops; 237 inspections were made. Attention was called to a few minor matters only.

INFECTIOUS DISEASES.

There was greater prevalence of scarlet fever than in any year since 1909, 42 cases occurring, and of diphtheria since 1906, 32 cases being notified. Apparently many cases were of mixed infection since in all the parishes specially affected (Down Ampney, Preston, North Cerney and Siddington) scarlet fever preceded diphtheria, and the first case of diphtheria had no apparent origin from any other known case. The spread of the complaints in the 3 latter parishes was associated with prevalence of the diseases in Cirencester, and appears to be attributed largely to school influence, missed cases being found at Elkstone, Siddington and Stratton. The insufficiency of accommodation at the Hospital was also partly responsible.

Whooping cough, chicken-pox and impetigo were prevalent in connection with 5 schools, the spread of impetigo at Poulton School being attributed to the use of towels in common.

Dr. Ashley gives an account of the County Scheme for the control over tuberculosis and says that as the bed owned by the Council at Winsley Sanatorium was no longer required it was sold. The three shelters owned by the Council have been in constant use.

ISOLATION HOSPITAL.

The accommodation being insufficient a new block for 12 beds is being erected.

DURSLEY RURAL DISTRICT

113

Area 26,876 Acres. Assessable Value: £57,212. 1d. Rate: £238.

Population 1901 ... 11,636

1911 ... 12,233

Increase 1901-11 ... 597 (5.1%)

Estimated Population 1914 ... 12,437

Medical Officer of Health ... R. A. Brewis, M.D.

CHIEF GEOLOGICAL SUBSTRUCTURES: Lower Lias Clay to Great Oolite.

CHIEF INDUSTRIES: Largely agricultural; iron works and saw mills, (Slimbridge), edged tool works (Coaley), cloth, leather-board and flour mills (Cam), agricultural implement, petrol engine, electric motor and bicycle works, and rope and carpet factories (Dursley), silk and elastic factory (Kingswood) and printing works (Wotton-under-Edge).

HOUSING.

Three hundred and three houses were inspected, defects being found in 52, all of which were remedied. Three closing orders were made. There was a considerable increase in the number of new houses (67), 38 having been erected by the Council at Dursley. It was also proposed to build 8 at Wotton-under-Edge, but the scheme has been postponed, owing to the war, with the consent of the Local Government Board. There is still a demand in every parish, except Owlpen, especially Dursley, Cam, Coaley and Uley.

SEWERAGE AND SEWAGE DISPOSAL.

DURSLEY AND CAM JOINT SCHEME.—In Dursley 57 new connections were made, bringing the total up to 556, but in Cam only 14, a total of 58. The sewer was extended to Rowley in the latter parish, but only 2 houses were connected, and

the scheme for the Garden City has not been carried out. The disposal works are reported to be satisfactory.

WOTTON-UNDER-EDGE.—A tender of £8,087 has been accepted, but progress is slow owing to the shortage of labour.

KINGSWOOD AND NYMPFIELD.—Sewerage schemes are required.

RIVERS POLLUTION.

The Cam is polluted at Dursley, by the discharge from an old sewer, and in Cam. The Dyer's Brook is similarly polluted at Wotton-under-Edge and Kingswood.

REFUSE DISPOSAL.

The new tip for Dursley at Woodmancote has been in use since December, effecting a great improvement. At Cam refuse is deposited in a disused lane, which is a highway, and a new tip is required. No suitable place can be found in Wotton-under-Edge for refuse which is now deposited on a farm in Kingswood.

WATER SUPPLY.

DURSLEY.—The windmill at the accessory supply for Poole Cottages was unsatisfactory and the houses are now supplied from the mains.

KINGSWOOD.—Many houses are a long distance from the stand-pipes and the mains should be extended.

CAM.—There is great need for a public water supply but no steps have been taken.

ULEY.—The well has been improved and a pump erected.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 2 common lodging-houses, 17 slaughter-houses, 84 dairies, &c., 24 bakehouses, 34 workshops and 3 outworkers' premises, of which frequent inspections were made. The

lodging-houses were kept satisfactorily and the condition of the bakehouses was good; the slaughter-houses were found in a fairly good condition.

INFECTIOUS DISEASES.

A considerable epidemic of diphtheria prevailed, especially in Dursley, 102 cases being notified. Searches were made at the schools and swabbings taken; in this way many cases were detected and it is satisfactory to note that closure of the schools was avoided. Personal contact of the children at school and in their homes was the main cause of the spread. Thirty-two cases of scarlet fever also were notified. All 4 cases of typhoid fever occurred in one house in Cam, 3 being fatal; the infection was introduced from Bath, and the other three cases appear to have been infected owing to the pollution of the well by the drainage.

ISOLATION HOSPITAL.

Careful measurements are given of the various rooms available for cases at the Moors, Coaley; the total capacity being 5,064 cubic feet, which at 2,000 cubic feet per head would suffice for less than 3 patients. Nine beds are, however, provided. The hospital, though not suitable for two diseases concurrently, was so used on three occasions during 1914, but no cross-infection occurred. A hospital of 4 wards with 12 beds for this district should be provided in combination with other districts.

There is no accommodation for small-pox, and the best course would be to have one hospital for the whole County.

116 EAST DEAN & UNITED PARISHES RURAL DISTRICT

Area 28,626 Acres. Assessable Value: £65,180. 1d. Rate: £272.

Population 1901	...	20,011
1911	...	19,952
		<hr/>
Decrease 1901-11	...	59 (.3%)
		<hr/>
Estimated Population 1914	...	19,933
		<hr/>

Medical Officer of Health:

O. W. Andrews, M.B., D.P.H., Deputy Surgeon-General R.N.

CHIEF GEOLOGICAL SUBSTRUCTURES: Coal Measures; New and Old Red Sandstone.

CHIEF INDUSTRIES: Coal mining, stone quarrying and agriculture.

HOUSING.

Of 49 houses inspected 38 had defects which were remedied: the total number inspected is 386. There is a most pressing need for new houses, 31 cases of overcrowding having been dealt with during the year, both in the mining district and and in the agricultural area of Churcham and Minsterworth. A Public Utility Society has been formed and will probably build houses in the mining area, but nothing is proposed for Churcham and Minsterworth.

SEWERAGE AND SEWAGE DISPOSAL.

CINDERFORD.—A change of caretaker at the outfall works has been made and it is hoped that improvement will result, but a satisfactory settlement is one involving a heavy outlay for which the time is not propitious.

DRYBROOK.—Several complaints were received and the drainage of Drybrook and Steam Mills was again considered.

Nothing was settled, but may be when other schemes are nearer settlement.

RIVERS POLLUTION.

MITCHELDEAN.—An application has been made for an injunction to prevent drainage entering the brook, and an action against the Council was pending.

REFUSE DISPOSAL.

The unsatisfactory conditions at Cinderford where systematic scavenging is undertaken is largely due to the carelessness of householders. The yards at Mitcheldean are still bad and need attention.

WATER SUPPLY.

From the return issued by the Local Government Board public supplies have been provided for East Dean (2,228 of the total 3,219 houses being connected) and Littledean (120 of 186), while in Abinghall and Mitcheldean there are private works supplying 4 of the 45 houses in the former and 90 of 157 houses in the latter parish. In the remaining 8 parishes there is no public supply.

BLAKENEY HILL.—The mains are to be extended to provide house services in lieu of standpipes.

RUARDEAN.—The supply is defective owing to unsatisfactory arrangements for distribution. It was decided to extend the Cinderford mains on certain conditions which had not been fulfilled.

RUARDEAN HILL.—The new engine has been fixed and the pumping plant is ready; plans for the remainder of the work have been prepared, but there are important details still requiring settlement.

VINEY HILL.—Fourteen of the 27 houses in the East Dean part of this locality have an excellent supply of well water; pro-

posals made by the Council for the supply of this part were not accepted by the West Dean Rural District for the houses in their area. The surveyor was instructed to make a further report.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

Fewer visits than usual were paid owing to the large amount of infectious disease.

INFECTIOUS DISEASES.

There was a record prevalence of scarlet fever, 208 cases being notified, of which 137 were treated in hospital. The places particularly affected were Cinderford, Drybrook and Littledean. Six children were found, in schools, to be suffering from scarlet fever, and owing to difficulty in getting parents and others to realise their responsibility, proceedings were taken in four instances. Four of the 14 cases of diphtheria proved fatal, 2 in the hospital. Of the 5 cases of enteric fever, the infection was traced to Bath in 2 cases and to Cheltenham in 1.

Twenty-two of the 44 cases of pulmonary tuberculosis were treated in the Sanatorium.

ISOLATION HOSPITAL.

The question of enlarging the hospital was under consideration but, owing to the war, the matter is in abeyance.

FARINGDON RURAL DISTRICT
(GLOUCESTERSHIRE PARISH OF LECHLADE.)

119

Area 3,870 Acres. Assessable Value : £5,324. 1d. Rate : £22.

Population 1901	...	1,179
1911	...	1,167

Decrease 1901-11	...	12 (1%)
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Estimated Population 1914	...	1,163
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Medical Officer of Health ... W. Sisam, M.D., B.Sc., D.P.H.

CHIEF GEOLOGICAL SUBSTRUCTURE: Oxford Clay.

CHIEF INDUSTRY: Agriculture, especially production of milk.

HOUSING.

Of 138 houses inspected 40 were found defective and 22 remedied. There is no deficiency of housing for the working-classes in this parish.

SEWERAGE AND SEWAGE DISPOSAL.

With the exception of outlying portions the whole town is sewered.

REFUSE DISPOSAL.

The Council will be recommended to adopt a system of scavenging.

WATER SUPPLY.

Two hundred of the 279 houses are supplied from the mains, the remainder are dependent on private wells.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

The number of these was the same as in 1913 with the omission of one workshop, namely 19; the lodging-house was

inspected twice and 17 visits were paid to the remaining 18 places.

INFECTIOUS DISEASES.

No case of acute infectious disease was notified, but scarlet fever was unduly prevalent in other parts of the district.

ISOLATION HOSPITAL.

The Abingdon Joint Isolation Hospital is used for cases from this district, but the Council possess 3 Berthon huts with concreted sites in three parts of the district; the latter would be useful in emergency and were overhauled recently to ensure that they would be immediately ready if required for the isolation of small-pox.

SANITARY INSPECTOR.

Some dislocation of work was caused by changes in this office. Mr. Hoddinott resigned in April and was succeeded by Mr. T. Casstles; the latter joined a Sanitary Corps towards the close of the year, his appointment being kept open. The duties were then carried on by Mr. Chadwick, the Surveyor, but proved too heavy, and in February, 1915, Mr. F. T. Thorp was appointed temporary inspector.

Area 30,680 Acres. Assessable Value: £86,192. 1d. Rate: £359.

Population 1901	...	10,779
1911	...	12,615
		<hr/>
Increase 1901-11	...	1,836 (17.0%)
		<hr/>
Estimated Population 1914	...	13,230
		<hr/>

Medical Officer of Health:

O. W. Andrews, M.B., D.P.H., Deputy Surgeon-General R.N.

CHIEF GEOLOGICAL SUBSTRUCTURES: Lower Lias and Alluvium.

CHIEF INDUSTRIES: Agriculture.

HOUSING.

Steady progress in inspection of houses is reported, 174 having been inspected during the year. Fifty-three were found defective, 41 being remedied. The total number of houses inspected in the four years was 686.

SEWERAGE AND SEWAGE DISPOSAL.

CHURCHDOWN.—The scheme has been completed.

LONGLEVENS (WOTTON ST. MARY WITHOUT) AND TUFFLEY.—Steps have been taken to prevent the pollution of wells with satisfactory results.

WATER SUPPLY.

The Gloucester Corporation have water rights over many of the parishes in this district and, from the return issued by the Local Government Board, supply the following parishes, the larger number being the total houses and the smaller the number supplied:—Barnwood (250-67), Brockworth (100-18), Hempsted (80-19), Highnam (61-3), Hucclecote (220-176), Longford (130-19), Matson (15-2), Upton St. Leonards (240-

12), Wotton St. Mary (391-283) and Wotton Vill (7-5). Since the issue of this return the mains have been extended to Churchdown. In the remaining 11 parishes there is no public supply.

CHURCHDOWN.—The works have been completed.

HEMPSTED.—The water supply of the cottages at Upper Rea is not satisfactory: consideration of the matter was postponed to enable the owner to make proposals for improvement. Lower Rea was supplied by cart in dry weather.

LONGLEVENS AND TUFFLEY.—Steps have been taken to prevent the pollution of wells with satisfactory results.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

All 137 places on the register were inspected.

INFECTIOUS DISEASES.

Scarlet fever was more prevalent than in any year since 1897, 61 cases being notified; 11 were removed to hospital. The disease was of a mild type and there were no deaths. There was a great reduction in the number of cases of diphtheria (from 42 to 15) especially in Churchdown, and it is hoped that now the drainage in this place has been improved cases will cease to appear. Four cases of enteric fever occurred in Upper Rea, Longford and Longlevens. On enquiries being made on a notification of cerebro-spinal fever at Elmore, several other cases were found highly suggestive of this disease but of an exceedingly mild type.

ISOLATION HOSPITAL.

Where necessary, cases have been sent to the City Hospital, as previously.

SANITARY INSPECTOR.

An Assistant to the Sanitary Inspector, who is also Highway Surveyor, was appointed in December, 1913.

LYDNEY RURAL DISTRICT

123

Area 24,554 Acres. Assessable Value: £52,476. 1d. Rate: £219.

Population 1901	...	8,649
1911	...	9,005
<hr/>		
Increase 1901-11	...	356 (4.1%)
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Estimated Population 1914	...	9,122
<hr/>		

Medical Officer of Health:

O. W. Andrews, M.B., D.P.H., Deputy Surgeon-General R.N.

CHIEF GEOLOGICAL SUBSTRUCTURES: Old Red Sandstone, Carboniferous Limestone, Keuper Marl and Alluvium.

CHIEF INDUSTRIES: Agriculture, with large tinplate works at Lydney and stone quarries at Tidenham.

HOUSING.

Of 193 houses inspected during 1914, 43 were found to be defective; the total number inspected was 539. Improvement in housing is developing slowly, building being chiefly of the better class houses; of 10 during 1914, 8 were built by owners for their own occupation. There is a shortage at Lydney and a movement has been set on foot for the erection of a few houses.

SEWERAGE AND SEWAGE DISPOSAL.

The sewage is discharged into the Severn at low tide.

WATER SUPPLY.

Public supplies have been provided for Alvington, Aylburton, Lydney and Woolaston, and Tidenham is supplied by a private company. No general supply has been provided for Hewelsfield, Lancut or St. Briavels.

LYDNEY.—The source is an adit in the Old Red Sandstone, and the water is pumped to covered reservoirs.

WOOLASTON.—No houses have yet been connected.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 6 slaughter-houses, 30 dairies, &c. (an increase of 1), 17 bakehouses and 41 workshops (an increase of 1); 167 visits of inspection were paid, and it is said that, speaking generally, there is a distinct improvement with respect to the cleanliness of cowsheds.

INFECTIOUS DISEASES.

A larger number of cases of scarlet fever (75) were notified than in any year since 1902; the disease was of a very mild type and was spread in many instances by unrecognized cases, not seen by a doctor. There was one fatal case of enteric fever in the person of a sailor from New York ill on arrival.

ISOLATION HOSPITAL.

The accommodation has generally been sufficient but was taxed more than usual during 1914. A table giving various particulars of the expenditure is included from which the estimated cost per patient per day was $2/0\frac{1}{4}$. The Hospital is now connected with the Alvington mains.

Area 8,825 Acres. Assessable Value : £7,832. 1d. Rate : £33.

Population 1901 ... 1,485

1911 ... 1,609

Increase 1901-11 ... 124 (8.4%)

Estimated Population 1914 ... 1,650

Medical Officer of Health ... A. Thomson, M.B., D.P.H.

CHIEF GEOLOGICAL SUBSTRUCTURES: Lower Lias, Keuper Marl and Alluvium.

CHIEF INDUSTRY: Agriculture.

HOUSING.

Thirty-four houses were inspected and 15 found to have defects of which 8 were remedied. Three new houses were built. There is no deficiency of accommodation for the working-classes.

SEWERAGE AND SEWAGE DISPOSAL.

One house was newly connected with a sewer and 3 supplied with flushing cisterns. Four improved closets were constructed.

WATER SUPPLY.

From the return issued by the Local Government Board there was no public supply in any one of the six parishes; but, during 1914, Long Marston was connected with the mains of the Evesham Villages Water Scheme; from time immemorial this village has suffered much from scanty and impure water supply and the provision constitutes a great benefit.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

All 7 dairies, cowsheds and bakehouses were inspected.

INFECTIOUS DISEASES.

There was a threatened outbreak of scarlet fever at Long Marston, Clifford Chambers and Welford-on-Avon which was checked, no cases occurring after April. The total number of cases was 11, 9 of which were removed to Hospital.

ISOLATION HOSPITAL.

It is a great benefit to the district to be able to promptly remove cases to the Joint Hospital.

NEWENT RURAL DISTRICT
(GLOUCESTERSHIRE PART).

127

Area 35,540 Acres. Assessable Value: £39,780. 1d. Rate: £166.

Population 1901	...	7,067
1911	...	6,964
<hr/>		
Decrease 1901-11	...	103 (1.5%)
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Estimated Population 1914	...	6,938
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Medical Officer of Health : W. M. L. Johnstone, M.B., Dublin.

Dr. Johnstone succeeded Dr. Higgins as Medical Officer of Health on the 1st October, 1914.

CHIEF GEOLOGICAL SUBSTRUCTURES: New and Old Red Sandstone.

CHIEF INDUSTRIES: Agriculture, a tannery and one or two small saw mills.

HOUSING.

No note.

SEWERAGE AND SEWAGE DISPOSAL.

NEWENT.—Drainage gives little trouble despite the rather ancient system owing to the subsoil being chiefly sand. Closets supplied with water have been newly connected. There is still a number of earth closets but buckets are being substituted at the instance of the Local Sanitary Authority.

A small stream close to Newent receives the effluent from the sewage tanks.

REFUSE DISPOSAL.

Refuse is collected twice weekly in Newent and tipped about a quarter of a mile from the town.

WATER SUPPLY.

From the return issued by the Local Government Board 18 of the 60 houses in Bromsberrow and 43 of the 328 in Dymock are supplied from the water works of the Malvern U.D.C., and 74 of the 591 in Newent from the Gloucester Corporation Water Works at Oxenhall. There is no public supply in the remaining 11 parishes; in these water is obtained from wells. A large number of them have been inspected and a great improvement has resulted.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

The common lodging-house is well conducted. No note is made as to inspection of other places.

INFECTIOUS DISEASES.

More cases of scarlet fever occurred than in any previous year, the total being 60. The spread was attributed to the mildness of the symptoms making diagnosis difficult; one case was treated in hospital. Of 8 cases of diphtheria 2 were fatal.

ISOLATION HOSPITAL.

An arrangement exists for the removal of cases to the City Hospital at Over, but Dr. Johnstone hopes to be able to report more favourably on the local Hospital at Oxenhall next year.

NORTHLEACH RURAL DISTRICT

129

Area 70,018 Acres. Assessable Value : £34,612. 1d. Rate : £144.

Population 1901 ... 8,100

1911 ... 8,056

Decrease 1901-11 ... 44 (.5%)

Estimated Population 1914 ... 8,056

Medical Officer of Health ... E. J. R. MacMahon, L.R.C.P.,I.

CHIEF GEOLOGICAL SUBSTRUCTURES: Inferior to Great Oolite.

CHIEF INDUSTRY: Essentially an agricultural district.

HOUSING.

Of 181 houses in Aston Blank, Shipton and Chedworth inspected, 105 were found to be defective; 6 were unfit for habitation, 3 closing orders were made and 1 house was closed. Many houses are old and dilapidated and if all not up to the standard were condemned there would be many people homeless; Dr. MacMahon thinks therefore it is best to go slowly. There is a shortage of houses at Chedworth.

SEWERAGE AND SEWAGE DISPOSAL.

Some improvements have been made at Northleach. In other parts water is rarely laid on to houses. The closets are either vaults or pails in the proportion of 3 to 1.

RIVERS POLLUTION.

The question of the pollution of the Leach at Southrop has been under consideration but is as yet unsettled.

REFUSE DISPOSAL.

In each of the last four reports systematic scavenging has been recommended for Northleach and this is now described as an essential necessity.

WATER SUPPLY.

ALDSWORTH.—It is imperative that a proper supply should be provided without delay.

BIBURY.—Several houses depend on brook water; the existing supply should be extended for their use.

NORTHLEACH.—The supply has to be husbanded in dry seasons, and a further source should be secured. There is water running to waste close to the present supply.

WITHINGTON.—The question is still unsettled; many people are dependent on the brook which is liable to pollution.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 3 slaughter-houses, 22 dairies, &c. (an increase of 2), 14 bakehouses (a decrease of 1), 13 workshops and 1 outworker's premises; these were all inspected during 1914 and regarded as satisfactory. The cows are said to be fairly well kept.

INFECTIOUS DISEASES.

Scarlet fever was more prevalent than in any year since 1907; outbreaks in 3 parishes were traced to infection from outside the district, but the origin of the cases in Northleach was not discovered.

ISOLATION HOSPITAL.

It is said that nursing and proper isolation are impossible in most instances in cottages. Prompt removal to Hospital cut short the epidemic at Northleach. There were no cases in the Hospital at the close of the year.

Area 17,326 Acres. Assessable Value : £17,508. 1d. Rate : £73.

Population 1901 ... 2,944

1911 ... 3,239

Increase 1901-11 ... 295 (10%)

Estimated Population 1914 ... 3,311

Medical Officer of Health ... D. Gordon-Evans, M.D., D.P.H.

CHIEF GEOLOGICAL SUBSTRUCTURE: Lower Lias Clay.

CHIEF INDUSTRIES: Market gardening and farming; also homework in glove making.

HOUSING.

Eighty houses were inspected and 52 found defective, 22 being remedied; 19 were unfit for habitation and 19 closing orders were issued. Dr. Gordon-Evans says the Council has adopted a progressive policy in the matter of re-housing and tenants displaced by closing orders have been housed in dwellings erected by the Council; 10 such houses have been built in Pebworth and 10 further houses at Cow Honeybourne are practically completed. A description of the houses which were erected from designs by the Surveyor and Sanitary Inspector is given and it appears that in each case there are 3 bedrooms and a bath. It is thought that there is now no deficiency of houses.

SEWERAGE AND SEWAGE DISPOSAL.

No new works or any alteration in the existing methods of sewage disposal were undertaken.

WATER SUPPLY.

From the return of the Local Government Board, all 10 parishes have general supplies, 5 from local sources and 5

in connection with other places; 4 of the 5 former were provided in whole or in part by private enterprise. The summer was very dry but there was sufficient water for all purposes.

At Willersey there were complaints of discolouration which was found to be due to iron. On opening up it was ascertained that only one of the two springs was affected and on cutting this off the supply was free of all impurities; the yield of the remaining spring is about 30 gallons per head per day.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 2 slaughter-houses (an increase of 1), 20 dairies, &c. (a decrease of 2), 5 bakehouses, 11 workshops and 43 outworkers' premises (a decrease of 17). Three hundred and eleven inspections were made and the registered dairies are said to have been found satisfactory; Dr. Evans gives seven points, which he says should be practised to ensure a supply of pure milk.

INFECTIOUS DISEASES.

More cases of scarlet fever were notified than in any previous year, the total being 34; 25 of these occurred in Willersey, and of this outbreak a fairly full account is given. The origin was the case of a child who was treated at home for scarlet fever; after the return of the child to school cases of sore throat with a rash were referred to Dr. Evans, who found that the children were suffering from scarlet fever. With this outbreak before him, Dr. Gordon-Evans advocates the swabbing or spraying of the throats of affected children with a good anti-septic.

The case of puerperal fever occurred in the practice of a certified midwife whose husband had recently died of erysipelas.

ISOLATION HOSPITAL.

Twenty-seven of the 35 cases of scarlet fever were removed to the Joint Hospital at Bengeworth.

DISINFECTION.

The usual practice has been to disinfect houses after certain infectious diseases, but not after erysipelas or puerperal fever ; Dr. Gordon-Evans says that all dwellings where notifiable infectious disease has occurred should be disinfected, and recommends spraying with formalin followed by washing with efficient disinfectant.

134 STOW-ON-THE-WOLD RURAL DISTRICT
(GLOUCESTERSHIRE PART).

Area 42,203 Acres. Assessable Value : £34,772. 1d. Rate : £145.

Population 1901	...	6,473
1911	...	6,803
<hr/>		
Increase 1901-11	...	330 (5.1%)
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Estimated Population 1914	...	6,927
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Medical Officer of Health ... R. E. B. Yelf, M.B., C.M.

CHIEF GEOLOGICAL SUBSTRUCTURES : Lower Lias to Great Oolite.

CHIEF INDUSTRIES : Agriculture, especially production of milk; stone slate quarrying at Eyford; also residential and fishing resorts.

HOUSING.

One hundred and fifty-three of the 201 houses inspected were found to be defective; all were remedied. Three houses unfit for habitation were closed voluntarily. Mr. Stewart, of the Local Government Board, inspected the district; he considered that certain houses were unfit for habitation, and recommended that the Council should build cottages at Bledington (where shortage had previously been noted), Bourton-on-the-Water and Naunton. He also advised the adoption of Building Bye-laws. Dr. Yelf agrees generally with this report.

SEWERAGE AND SEWAGE DISPOSAL.

The systems at Bourton-on-the-Water and Upper Slaughter continue to work in a satisfactory manner. The complaints of the Thames Conservancy Board necessitated alterations at Broadwell and a system of irrigation has been arranged.

REFUSE DISPOSAL.

Scavenging is undertaken only at Bourton-on-the-Water where it is much appreciated.

WATER SUPPLY.

BLEDINGTON.—The supply is in a very unsatisfactory condition.

CLAPTON.—The supply is deficient after a spell of dry weather and it is proposed to sink another well.

LOWER SWELL.—The mains have been extended to several cottages.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 3 slaughter-houses, 31 dairies, &c. (an increase of 2), 13 bakehouses (a decrease of 1) and 27 workshops (a decrease of 11). The slaughter-houses are said to be kept in a satisfactory condition and the dairies, &c., are described as being satisfactory. A considerable quantity of milk is exported.

Urban powers with respect to offensive trades have been obtained, and bye-laws are recommended for the control of two flesh-boiling places at Oddington and Lower Slaughter.

INFECTIOUS DISEASES.

Scarlet fever was again prevalent, for the most part a continuation of the outbreak in Lower Slaughter in 1913. Two cases were treated in Hospital, one, a Winchcombe case, in the Winchcombe Isolation Hospital, and one, by special arrangement, in the Northleach Isolation Hospital.

ISOLATION HOSPITAL.

There is none; but the small-pox tents are reported to be in good order and ready for immediate erection.

Area 37,223 Acres. Assessable Value: £107,956. 1d. Rate: £450.

Population 1901	...	27,793
1911	...	28,068
		<hr/>
Increase 1901-11	...	275 (1.0%)
		<hr/>
Estimated Population 1914	...	28,281
		<hr/>

Medical Officer of Health ... R. Green, M.D., D.Hy.

CHIEF GEOLOGICAL SUBSTRUCTURES: Lower Lias to Great Oolite.

CHIEF INDUSTRIES: Cloth mills; flock mills; pin mills; carpet and stick factories; engine, paint, rubber, boat, brick, printing and piano works; quarrying; ready-made clothing; agriculture.

HOUSING.

The inspections show a marked increase from 226 in 1912 and 246 in 1913 to 525 in 1914; 110 houses were defective, 100 being remedied on notice, and 6 were unfit for habitation. No closing orders were made. The chief defects noted were the same as in previous years. There was a slump in building in the latter half of the year and the total number of houses built was only 20, the average of the previous 10 years being 30. The question of providing houses was referred to the Parish Councils and their replies were considered by a Committee; it was finally decided that the time was inopportune for action and that any shortage would be met by private enterprise.

SEWERAGE AND SEWAGE DISPOSAL.

A good proportion of the houses in the sewered districts are now connected and the number newly connected (21) during the year is less than in previous years; the total is 1,700. In

parishes of low assessable value the expense of sewerage becomes a heavy burden. In many cottages, however, it is exceedingly difficult to dispose of the contents of privies, and it would be a distinct hygienic advantage if the contents were removed by the local authority in populous centres. Water closets are gradually ousting the filthy and dangerous privy midden, and where there is no sewerage system earth closets should take their place.

RIVERS POLLUTION.

The main stream receives trade washings, causing much discolouration, and a certain amount of sewage pollution; owing to the very gradual fall there is little aeration which is necessary for self-purification.

REFUSE DISPOSAL.

There is systematic scavenging in six parishes.

WATER SUPPLY.

The Stroud Water Company supplies 2,925 houses, 42.6% of the total; there are three local service reservoirs at Painswick, Nailsworth and Horsley. The water is softened and is organically very pure. Bisley, Randwick and a portion of Whiteshill are not connected with the mains as yet. Many villages are supplied from deep springs which are of good quality, but other parts are dependent on shallow wells, liable to pollution. Miserden has been provided with water, brought in pipes from a considerable distance, by the Lord of the Manor.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 33 slaughter-houses (an increase of 8), 93 dairies, &c. (a decrease of 15), 39 bakehouses and 75 workshops (a decrease of 2); the names of only two outworkers in paper bags were received, no lists of homeworkers in wearing apparel arriving from the urban district. The slaughter-houses

though old are, as a rule, well kept; the co-operation of butchers should be obtained in reporting for examination all doubtful specimens of meat. Many of the cowsheds are very imperfect and cows are not, as a rule, groomed; some of the filth of necessity finds its way into the milk. Few unbiassed persons will deny the necessity of matters being improved, as they ought to be by the new Milk Bill.

INFECTIOUS DISEASES.

There was greatly increased prevalence of both scarlet fever and diphtheria which spreading slowly but surely through an area takes 2 or 3 years to burn itself out. It began in 1913 and continued throughout the year. Searches were made for unrecognised cases at schools, but though there were probably several, no definite cases of scarlet fever were discovered. The parishes most affected by this disease were two which were clear of the disease in the two previous years, Stonehouse and Kingstanley. The chief cause of the spread was personal contact.

More than one-third of the 72 cases of diphtheria occurred in Bisley, when the school was closed off and on from April to September; in connection with this outbreak over 400 swabs were taken and numerous "carriers" thus detected. The fatality was much above the average.

Thirty-one of the 72 cases of tuberculosis were found to be occupying rooms with other persons, "some of whom will no doubt be on the lists of future years." The procedure in dealing with cases is outlined, and it is noted that sanatorium treatment was offered to all suitable cases and that 43 were admitted.

ISOLATION HOSPITAL.

The main Hospital is at Cainscross and that for small-pox is in Bisley Parish. During the 10 years the former has been open 1,240 patients have been treated, the average fatality for

scarlet fever being 2.1 %, and for diphtheria 8.4 %; the corresponding figures for 1914 were 3.8 % and 15.1 %. The year was an extremely busy one; some of the cases of scarlet fever were of a malignant type and those of diphtheria, on the whole, were severe, many being practically moribund on admission.

Area 26,300 Acres. Assessable Value : £19,700. 1d. Rate : £82.

Population 1901 ... 3,800

1911 ... 3,913

Increase 1901-11 ... 113 (3.0%)

Estimated Population 1914 ... 3,946

Medical Officer of Health: M. Ashley, M.B., D.P.H.

CHIEF GEOLOGICAL SUBSTRUCTURES : Inferior to Great Oolite.

CHIEF INDUSTRIES: Agriculture, especially milk production.

HOUSING.

After an inspection by Dr. Carnwath, the Local Government Board drew the attention of the Council to the seriously defective conditions in Avening, Cherington, Didmarton and Newington Bagpath and urged the Council to provide varying numbers of houses in seven parishes, and to expedite the inspection of houses and the remedy of defects. The Council are unwilling to build. Some details of the affected parishes are given, and Dr. Ashley urges the issuing of closing orders more frequently, as he thinks it would expedite the repairing of houses though there is a great dearth of labour for the purpose. All 85 houses inspected during 1914 were found to be defective, and 35 were remedied; representations were made as to 31 houses which were unfit for habitation but closing orders appear to have been made with respect to 9 only.

SEWERAGE AND SEWAGE DISPOSAL.

DIDMARTON.—The surface water drain used as a sewer, to which reference was made last year, was covered in the village but below is open and runs along the highway for

some 75 yards to a field. There is no real method for the disposal of the sewage and considerable nuisance arises, especially in the summer. The matter has been under the consideration of the Parish Council but nothing has been done.

LEIGHTERTON.—The recurrent nuisance mentioned last year has apparently been abated by laying a drain from the farm to a field for irrigation.

WATER SUPPLY.

A short account is given of the water supply of each of the 11 parishes—1 is supplied by the West Gloucestershire Water Company, 6 have private supplies and 4 have no general supply; the parishes to which it appears that attention should more particularly be given are Beverstone, Leighterton and Tetbury Upton. The supply for Shipton Moyne is drawn from an unsteined well, distant about 10 yards from the lake in the grounds of Estcourt House, fed by the river Avon; the effluent from the Tetbury Sewage Works is discharged into the Avon and the well probably draws its water indirectly from the river. Dr. Ashley urges that the water should be analysed regularly.

The matter is most urgent in Tetbury Upton and a supply should be obtained from the Urban District when it is available or in some alternative manner. The West Gloucestershire Water Company have extended their limits, but the parts most in need are not likely to benefit unless an agreement is made.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

The number was the same as in 1913, namely 35; 72 inspections were made and it is said that, with the exception of farmyards, the conditions are usually satisfactory. Improved conditions in dairies and farmyards are desirable; most of the milk is sent away by rail.

INFECTIOUS DISEASES.

One case each of scarlet fever and enteric fever, and 5 cases of tuberculosis were notified; mumps and chicken-pox were prevalent in 3 parishes and the schools were closed.

ISOLATION HOSPITAL.

There is no Isolation Hospital.

TEWKESBURY RURAL DISTRICT
(GLOUCESTERSHIRE PART).

143

Area 28,366 Acres. Assessable Value : £38,008. 1d. Rate : £158.

Population 1901	...	4,986
1911	...	5,074

Increase 1901-11	...	88 (1.8%)
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Estimated Population 1914	...	5,074
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Medical Officer of Health: A. Fowell-Turner, L.R.C.P. Ed.

CHIEF GEOLOGICAL SUBSTRUCTURES: Keuper Marl, Lower Lias and Alluvium.

CHIEF INDUSTRIES: Entirely agricultural—pasture, corn and market gardening.

HOUSING.

Sixty-six houses were inspected, 61 being found defective; many defects were made good but several houses were still in a bad condition. A site has been acquired at Aston Cross, in Ashchurch Parish, and 10 houses will be built.

SEWERAGE AND SEWAGE DISPOSAL.

The disposal works at Ashchurch are reported to be in a very satisfactory condition; there has been a distinct improvement in the condition of the ground and of the effluent. Negotiations are in progress for a site for disposal works at Tredington.

REFUSE DISPOSAL.

No remark.

WATER SUPPLY.

From the return recently issued by the Local Government Board 6 of the 15 parishes are supplied from the Cheltenham

mains in whole or in part, 1 has a supply from Bredon Hill provided by the Council, and 1 is supplied privately ; the remaining 7 apparently have no general supply. During 1913 work was commenced in connection with the supply of hamlets in Ashchurch Parish from the Cheltenham mains and it was hoped would soon be finished.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 40 dairies, &c. (a decrease of 12), 9 bake-houses (an increase of 1) and 26 workshops (an increase of 7); 137 inspections were made. It is noted that general improvement was found in the condition of dairies, cowsheds and milk-shops, but a large number of notices to cleanse was issued.

INFECTIOUS DISEASES.

No cases of diphtheria have been notified for 2 years; the number of cases of scarlet fever notified during 1914 was 21, 18 of which were removed to Hospital.

ISOLATION HOSPITAL.

The Hospital serving this district is the Joint Hospital at Tredington.

Area 64,241 Acres. Assessable Value: £135,328. 1d. Rate: £564.

Population 1901	...	18,487
1911	...	19,079
<hr/>		
Increase 1901-11	...	592 (3.2%)
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Estimated Population 1914	...	19,283
<hr/>		

Medical Officer of Health: T. Rhind, M.R.C.S., D.P.H.

CHIEF GEOLOGICAL SUBSTRUCTURES: Alluvium, New and Old Red Sandstone, Carboniferous Limestone and varied Volcanic Rocks.

CHIEF INDUSTRIES: Mainly agricultural, especially milk production: also docks at Sharpness and stone quarrying at Tytherington.

HOUSING.

Three hundred and ninety-two houses were inspected, 320 being more or less defective; 152 of these had been remedied by the end of the year. There is a need for more houses at Charfield; a site was obtained, plans were prepared and a loan was provisionally sanctioned, but the scheme has been temporarily stopped owing to the war. It is thought that great improvement in the sanitary condition of the houses in Thornbury, which was in course of inspection, could be effected by the expenditure of a small amount of money.

SEWERAGE AND SEWAGE DISPOSAL.

The only constructive work was the extension of a sewer at Sharpness, apparently the only place sewered.

REFUSE DISPOSAL.

Collection is undertaken only at Berkeley and Thornbury, but should be carried out in all parts.

WATER SUPPLY.

From the Return issued by the Local Government Board, 6 of the 24 parishes are supplied in whole or in part by the West Gloucestershire Water Company, 1 by the Bristol Water Company and 2 by private supplies; the remaining 15 are dependent on wells. Sixteen houses were newly connected with the mains of the West Gloucestershire Water Company.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These are 3 more than in 1913 (461) owing to an increase in the number of dairies, &c. One thousand and fourteen inspections were made and the places found generally satisfactory, but the cowsheds showed a large margin for improvement.

INFECTIOUS DISEASES.

There was an increase in the numbers of cases of both scarlet fever and diphtheria. The former occurred more particularly at Thornbury and Berkeley. Thornbury and Purton suffered most from diphtheria. Nurses were provided by the Council for Purton and Berkeley and helped considerably to prevent the spread of the diseases. Neither of the 2 cases of enteric fever could be traced.

Records are given of the cases seen at the Tuberculosis Dispensary at Thornbury, and it is noted that there has been a marked reduction of deaths during the past two years.

ISOLATION HOSPITAL.

There is none for general infectious diseases; but the small-pox hospital at Milbury Heath is reported to be in good order though the water supply is very precarious.

Area 10,089 Acres. Assessable Value : £53,096. 1d. Rate: £221.

Population 1901 ... 15,945

1911 ... 17,188

Increase 1901-11 ... 1,243 (7.8%)

Estimated Population 1914 ... 17,618

Medical Officer of Health ... T. Aubrey, M.B.

CHIEF GEOLOGICAL SUBSTRUCTURE: Upper Coal Measures.

CHIEF INDUSTRIES: Shoemaking (chiefly home work), coal mining, chocolate factory, tailoring, corset factory, brick and tile works, paper mills, iron foundry, market gardens and dairy farms.

HOUSING.

The housing inspection was pushed on vigorously until the outbreak of war, but since that time owners have not been pressed to make minor improvements; the numbers of houses inspected and of those found defective are not given.

There was a difference of opinion locally as to the need for more houses at Bitton, but after an inspection and a local inquiry the Local Government Board required the erection of 8 houses; particulars of a site of $6\frac{1}{2}$ acres on a lane running to Field Grove have been sent to the Board.

SEWERAGE AND SEWAGE DISPOSAL.

MANGOTSFIELD.—The filters have long been overtaxed and an additional filter is to be erected.

SISTON.—The chief work is that of getting owners to connect houses. Pollution of a well was said to have been caused either from the sewers or the waste from the chocolate factory, but no evidence of this was found.

BATH SEWAGE WORKS.—It is said that these were an intolerable nuisance to persons living in the neighbourhood, but there was improvement in the last two months of the year.

RIVERS POLLUTION.

The waters of the Boyd Brook are utilised in the colour works at Wick and the paper mill at Bitton.

REFUSE DISPOSAL.

Systematic scavenging is undertaken only in Mangotsfield.

WATER SUPPLY.

The main supply is that of the West Gloucestershire Water Company. The water supplied was persistently hard and the Council opposed the Bill of the Company for obtaining, amongst other powers, a new source at Shipton Moyne. Finally, as a compromise, it was agreed that, if the new supply did not prove satisfactory, the Company would deliver water from the old sources softened to 18° of hardness.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

The number of these appears to be somewhat smaller than in the previous year; they were visited periodically and no cause for serious complaint was found.

INFECTIOUS DISEASES.

The decrease in the prevalence of infectious disease noted in 1913 continued in 1914, the number of cases of diphtheria (18) notified being less than in any year since 1906 and of scarlet fever (59) since 1909; the majority of the cases occurred in the first three months of the year. An interesting account of a possible acute scarlet fever "carrier" is given. Systematic search for diphtheria "carriers" was made in the Oldland Common Infants' Department and 20 "carriers" were found; the children were excluded and throat brushes and lotion supplied.

The scheme for the treatment of tuberculosis works smoothly and will be productive of good.

ISOLATION HOSPITAL.

The Hospital was open all the year, and an electric lighting plant has been installed. A definite agreement has been settled whereby 8 beds are reserved for cases from the Kingswood Urban District.

A site of $6\frac{1}{2}$ acres has been acquired for a Tuberculosis block, plans for which have been submitted to the Local Government Board.

Area 21,469 Acres. Assessable Value: £33,352. 1d. Rate: £139.

Population 1901	...	12,624
1911	...	13,454
		<hr/>
Increase 1901-11	...	830 (6.6%)
		<hr/>
Estimated Population 1914	...	13,750
		<hr/>

Medical Officer of Health ... P. Buchanan, M.B.

CHIEF GEOLOGICAL SUBSTRUCTURE: Coal Measures.

CHIEF INDUSTRIES: Coal mining (West Dean); agriculture (English Bicknor, Newland and Staunton).

HOUSING.

The number of houses inspected was 101. Fifty-one were found to be defective, of which 44 were remedied. The survey does not proceed so quickly as Dr. Buchanan would like, and there are still parts of the district which he has been unable to cover. The essentials specially considered are dryness, ventilation, light and food storage.

Progress with the Cannop Model Village has been stopped owing to the war, but the scheme will probably be resuscitated at its termination. A Public Utility Society was formed in May and it was proposed to build 24 houses near Parkend and 24 near Bream; as no loans are being sanctioned at present, that scheme also is in abeyance. This set back is regretted particularly in connection with the campaign against tuberculosis, and with the possibility of sufficient room in houses for the isolation of infectious cases. Thirty-five new houses were, however, erected, 6 by the District Council. There is deficiency of housing in Newland parish and at Bream, Redbrook and Yorkley in West Dean.

SEWERAGE AND SEWAGE DISPOSAL.

It is again remarked that owing to the extent and conformation of the district a drainage scheme is impracticable. Slop waters are disposed of on waste land, on gardens or in tanks, and the usual closet is a privy. In 1914 7 more houses were fitted with water closets and a further 3 with baths only.

WATER SUPPLY.

Once or twice during the year water was very low, but the want was not felt so acutely as in some previous years; this must not allow efforts to be reduced, as the present arrangements do not provide a safe or an adequate supply. On financial assistance being promised by the Treasury—as a result of representations by the County Council and District Council—Mr. Radford's scheme for obtaining a supply from the Old Red Sandstone, Howbeach, was adopted and boring is now in progress near Blackpool Brook.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 12 slaughter-houses (an increase of 1), 29 dairies, &c., 23 bakehouses and 41 workshops; 93 inspections were made of 64 of the places. The slaughter-houses are kept fairly clean and the workshops are all well ventilated.

INFECTIOUS DISEASES.

Twenty-one cases of diphtheria were notified, 16 occurring at Bream in the autumn disseminated by the infants' school which was closed shortly before the Christmas holidays. There were 61 cases of scarlet fever, 31 less than in 1913, most of them at Hillersland and Christchurch; the spread appears to have been attributed to uncertainty in diagnosis and infection by unrecognised cases. The first information of cases in this locality came in a letter from a mother stating that her child had scarlet fever and that no doctor was in attendance.

One of the cases of enteric fever was connected with some in the Coleford Urban District, but no certain cause could be assigned for the remaining two in one house.

As regards tuberculosis Dr. Buchanan refers to the advantage of early diagnosis in the interest of patients and the measures then made available for treatment and disinfection; 15 of the cases were admitted to the Sanatorium and nearly all have derived untold benefit from it. Mention is also made of the importance of improving housing conditions.

ISOLATION HOSPITAL.

There is none.

WHEATENHURST RURAL DISTRICT

153

Area 24,462 Acres. Assessable Value: £43,260. 1d. Rate: £180.

Population 1901	...	6,105
1911	...	6,093
<hr/>		
Decrease 1901-11	...	12 (.2%)
<hr/>		
Estimated Population 1914	...	6,090
<hr/>		

Medical Officer of Health: M. Ashley, M.B., D.P.H.

CHIEF GEOLOGICAL SUBSTRUCTURE: Lower Lias rising on hills to Inferior Oolite.

CHIEF INDUSTRIES: Chiefly agriculture; also boat building and river work, near Severn, leather board factory at Eastington and a malt factory.

HOUSING.

An inspection was made by Dr. Carnwath on behalf of the Local Government Board, but no special recommendations were made for the consideration of the Council. Seventy-three houses were systematically inspected during the year and 37 were found defective, 32 being remedied. Of 6 houses reported to be unfit 2 were made habitable without and 2 after closing orders had been served. Of the 4 reported last year, 3 have been satisfactorily repaired, and one has been allowed to go to ruin. There is no real scarcity of houses in any parish; 65 houses under a rental of £16 per annum were vacant and in good condition.

SEWERAGE AND SEWAGE DISPOSAL.

EASTINGTON (ALKERTON).—The exact number of houses connected is unknown. The sewer discharges into a tank on a dairy farm with an overflow to a water course; when the land is drier a system of filtration and irrigation is to be provided.

In various parts surface water drains to which slop water drains have been connected have caused nuisance; in one instance at Brookthorpe a series of cases of septic tonsillitis arose. Ditches into which drains discharge at Frampton, Fretherne and Eastington are periodical sources of trouble; some remedial measures were taken during the year. The chief type of closet is the privy vault, but there are a few water closets draining either to cesspools or to recognised or unrecognised sewers.

WATER SUPPLY.

On the eastern side abundance of water is available from springs on the Cotswold Hills; many houses have a good supply carried by pipes but in other cases water has to be carried long distances. On the western sides shallow wells are the chief sources, liable to pollution and often deficient, as so often described. A good supply is available from the Standish Park mains but the Moreton Valence Parish Council have taken no action in their special case though the matter was referred to them by the District Council in 1913. At Harescombe 12 cottages are dependent on a stream, liable to pollution, 200 to 300 yards distant; another part to which attention was particularly drawn during 1914, owing to the occurrence of a case of typhoid fever, was Fromebridge, Eastington, where 12 houses were supplied by a well fed by the polluted Frome.

From the summary of water supplies issued by the Local Government Board two parishes (Eastington and Frocester) are supplied in whole or in part by the Stroud Water Company, and two in part (Brookthorpe and Standish) by private sources, while the remaining nine have no systematic supply.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

These include 9 slaughter-houses, 38 dairies, &c. (an increase of 8), 8 bakehouses (a decrease of 1) and 24 workshops (an increase of 5). Eighty-seven visits of inspection were paid. Some improvements were made; as regards bakehouses it is

said that they compare favourably with those in other rural districts, and that, though not modern, they are kept clean.

INFECTIOUS DISEASES.

Scarlet fever was more prevalent than in any year since 1909, 35 cases being notified; 27 occurred in Frampton, the first 7 persons being closely related. Difficulties arose owing to 3 bakehouses being affected, but no accommodation for cases at the Stroud Isolation Hospital was available. Suspicious school absentees were examined; one girl suffering from nasal discharge, probably caused by unrecognised scarlet fever, was found. Five cases of diphtheria and 1 of typhoid fever were also notified, the water supply in the last case being obtained from a well at Fromebridge, not sufficiently protected from the river Frome. Speaking of the six cases of tuberculosis, Dr. Ashley records that two of them were mother and son and that, prior to notification, 2 adults and 3 children occupied one bedroom. An account of the County Scheme is given.

ISOLATION HOSPITAL.

No beds could be obtained at the Stroud Isolation Hospital when they were wanted. There is a wooden building in the grounds of, and 25 yards from one end of, the workhouse originally erected for isolation of small-pox; and the Guardians have a steam disinfecter for their own purposes.

SANITARY INSPECTOR.

Dr. Ashley records the death of Mr. Daniells, and the appointment as Sanitary Inspector and Surveyor of Mr. Mugliston, who, he says, will no doubt have little difficulty in obtaining his Sanitary Inspector's Certificate in the near future.

Area 55,529 Acres. Assessable Value : £48,116. 1d. Rate : £200.

Population 1901 ... 8,709

1911 ... 9,531

Increase 1901-11 ... 822 (9.4%)

Estimated Population 1914 ... 9,531

Medical Officer of Health ... W. Cox, M.R.C.S.

CHIEF GEOLOGICAL SUBSTRUCTURES : Lower Lias to Great Oolite.

CHIEF INDUSTRIES: Agriculture, market gardening, fruit cultivation, paper mill, fruit canning factory and leather and tanning factory.

HOUSING.

Loans were sanctioned by the Local Government Board for building 6 cottages at Alderton, 6 at Beckford, 2 at Snowhill and 12 at Winchcombe, and it was hoped they would be completed in a few months. No systematic house inspection was undertaken owing to the whole of the time of the Sanitary Inspector being taken up with sewerage work and other duties.

SEWERAGE AND SEWAGE DISPOSAL.

BISHOP'S CLEEVE.—Steps should be taken to insist on the connection of the remaining 41 houses with the sewers.

WINCHCOMBE.—There are still 72 houses with imperfect drainage, principally discharging into loose stone culverts in the streets, which should be connected with the sewers; a total of 108 houses were newly connected during 1914. The disposal works are working fairly well; there was only one

complaint of the effluent being offensive and of this there was no proof.

REFUSE DISPOSAL.

In each of his three previous reports Dr. Cox pointed out the desirability of systematic collection of refuse at Winchcombe, and is now able to record that scavenging has commenced.

WATER SUPPLY.

From the return as to water supplies issued by the Local Government Board 4 of the 28 parishes had been supplied by the District Council, 7 had private supplies and in 17 there was no public supply. Since this return was made a scheme has been carried out for Guiting Power (1913), and an amended scheme has now been approved for Alderton, Bishop's Cleeve (supplementary supply), Didbrook, Great Washbourne, Southam, Winchcombe (supplementary supply) and Woodmancote, though parts may not be carried out in the first instance. Dr. Cox says when this is completed he knows of no other part of the district that has not a good and ample supply of water.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

The numbers vary considerably from those given in previous reports; 110 visits of inspection were paid to 68 places. Dr. Cox observes that the milk supply is continually increasing in volume and forms a large item in the agricultural work, and that every year sees some improvement.

INFECTIOUS DISEASES.

Twenty-three cases of scarlet fever and 3 of diphtheria were notified, and all, except one case of scarlet fever, were removed to Hospital. The outbreak of scarlet fever at Hawling led to the closure of that school. Measles was prevalent in four parishes and whooping cough in one, and the schools affected were closed for a time.

ISOLATION HOSPITAL.

The Hospital has again proved itself most useful, and has been the means of preventing the serious spread of infection.